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PRESIDENT'S ADDRESS.*

G. S. BRYAN, M. D.,

AMORY, MISS.

Ladies, Gentlemen, Fellow-Members, Friends:

I wonder if the public has ever given thought to the record that this Association has made? I wonder if our own membership has taken time from the carking cares of an arduous life to review the history that we have made as an Association? I wonder if we understand and appreciate the opportunities and possibilities that are ours, even now, for service to the people? And I wonder if we realize, as we should, that with every opportunity for achievement and service there is an attendant and binding obligation? Having propounded these inquiries, I shall, as briefly as I may, recount some of the things for which as an Association we have stood, as well as some of the things that we have accomplished. I am well aware that the task that I have set myself is prosaic and that I can not hope to make it interesting and entertaining, but I promise that I shall omit details as much as possible in my narration.

The first meeting for the purpose of organizing a state-wide association of medical men was held at Jackson on the fifteenth of December, 1856. At that time officers were elected and a constitution and by-laws were adopted, and delegates to the American Medical Association were chosen. The meeting then adjourned to meet November of the following year. But this meeting was not held—in fact no other meeting was held until after the war between the States. To be exact, the next meeting was held at Jackson on the twentieth of April, 1869. This meeting was called by a group of Vicksburg doctors. At that meeting this Association really had birth; for while some changes have been worked out, there has been no failure to meet and function since then. At that meeting an effort was made to organize component county societies somewhat after the idea and plan that is now followed. The next meeting was held in Vicksburg and besides rendering a scientific program, a committee was appointed to memoralize the legislature and request the creation of a licensing board. This seems to have been the first awakening of the public conscience on the subject of protection of public health.

For the next few years history is silent as to what may have been done in and by the Association beyond the fact that regular yearly meetings were held. But at a meeting held in Grenada in 1877 a committee report was made that showed a bill had been passed by the legislature creating a board of health. But the bill proposed by the Association had been so emasculated as to render it useless. At this meeting the Association went on record as favoring reporting and keeping vital statistics. Nothing of importance was done at the 1878 session. The 1879 meeting, which was held

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at Aberdeen, resolved into a lodge of sorrow held in memory of members who had given their lives a willing sacrifice in the battle against yellow fever in the fearful epidemic of 1878.

Permit me to digress here that I may say there were giants in those days in the ranks of those who composed the membership of this Association. They were not giants only, but they were heroes and patriots as well. While these men lived and loved, labored and died before our day and generation they left us an example of heroism and patriotism, devotion and consecration to science and to duty that we should delight to extol and to emulate. I should like to call the roll of names of men, who dying in fearless discharge of sacred duty, richly deserve to have their names inscribed in bold and glittering type on the brightest page for our illustrious dead. But for fear that I might not be able to call them all I shall not name any. But let us not forget that these men are just as worthy a place in our halls of fame as those who gave their lives on the field of carnage in fratricidal conflict.

Nothing beyond regular meetings seems to have been accomplished for a few years at this time in the Association's history. But it should be remembered that the question of a charter for the Association and the passage of an effective medical practice act was agitated and urged at each annual meeting. As a result of this agitation, the legislature at its 1882 session passed a law which required all those then engaged in the practice of medicine in the State to register in the county in which they held residence. It also required all who might desire to begin the practice thereafter to undergo examination as to qualifications and to submit evidence of moral fitness. This law provided for a licensing board for each congressional district. Of course that meant that different standards would prevail in diéerent districts. For some years nothing more than the adoption of a constitution and by-laws was entered on record. I might say, however, that the Jacksonville outbreak of yellow fever, which occurred in 1888, caused great alarm and confusion throughout the State and as a consequence a large sum of money was put at the disposal of the Board of Health and its committees. While I believe that this money was as wisely and judicially expended as was possible under the existing circumstances, still I suspect that no real good came of its use; for at that time nothing was known as to the etiology of yellow fever, hence no effective means of prevention could be used. This year and this epidemic, I think, saw the last of the old time shot-gun quarantine.

In 1889 Dr. B. F. Kittrell presented a paper in which he advocated the creation of a single licensing board in lieu of the district boards then in vogue. No important history was made by the Association for the next few years, but through its committees and through the efforts and influence of its individual members the legislative mind was being molded and directed, insomuch that in 1892 a single board displaced the district boards. A special meeting of the Association was held in Jackson on the second of November of this year, at which meeting five members of the examining board were elected and a draft for a new constitution and by-laws was considered and referred to the next regular meeting.

In 1895 the Association urged the creation of a Board of Health—also that a medical department of the State University be established. It also appointed a committee to prepare a draft for a charter for the Association. This draft was made and submitted for approval and on September 20, 1895, it was approved by Gov. John M. Stone. The Association now runs under this charter. The legislature having acted favorably on the suggestion that a Board of Health be created, this was done at the 1898 meeting. It was set forth and declared that the object of this Board should be the

collection of vital statistics, the development of medical literature and a general superintendence over the health interests of the State. For some years the chairman of the Board made a report of its activities to the Association. This Board was separate and apart from the licensing board. Interest soon waned, however, and this Board ceased to function.

From 1895 until 1903 nothing beyond regular meetings and scientific programs was accomplished. Dr. McCormick, who was the field representative of the American Medical Association, attended the 1903 meeting and delivered an address in which he urged re-organization along the lines suggested by the A. M. A. A special committee was appointed to study these plans and make suggestions thereon. After careful consideration they recommended that these suggestions be adopted. By this vote the Association became affiliated with and a component part of the A. M. A. At the next meeting, in the spring of 1904, after one year's membership with the A. M. A., the councillors' report showed organization of component societies in forty-six counties, with an aggregate membership of five hundred and twenty. I trust I may be pardoned for a personal reference when I say that your president became a member of this Association in this year, 1903-4. My home county, Monroe, was organized in the summer of 1903 and I was made its first secretary and chosen as its first delegate to this Association. I attended the meeting held in Jackson beginning on the twentieth of April, 1904. Since then I have failed to attend but one meeting and I failed then because of serious sickness in my own family. And but for the encouragement, stimulation and inspiration I have received, and the joy that has come into my life from association with my fellows, I do not believe that I could have carried on till now.

While it may not be easy to point out many brilliant or important achievements of the Association during its first three decades, still all that it has since accomplished, as well as all that we confidently predict and expect shall yet be done, is because of the dreams and hopes and aspirations of those who came before us and planned so well and labored so assiduously At the 1904 meeting the President's address was conspicuous because of the thought and logic and brilliance of it. This president had for the preceding four years been a member of the Board of Health as well. In this address he pointed out the complex situation that confronted the Association. He emphasized the fact that the conservation of health and the preservation of life was a duty devolving upon doctors, and this duty could only be discharged by men who were fitted and prepared. He stressed the fact that the need of the hour was not for *more* doctors but for *better educated* doctors. He stated that during the four preceding years, seven hundred and fifty young men had applied for license to practice medicine and that three hundred and fifty-two had failed—that three-fourths of those that failed were astonishingly ignorant, devoid of the least education—that they failed because they knew no medicine and could never learn medicine because they had no foundation on which to build—no collateral education. He argued that the medical student should be liberally educated—in fact should possess a college education before being admitted into a medical school. He also urged the establishment of a Bureau of Vital Statistics. He urged the employment of capable County Health Officers. He also suggested the provision of free diagnostic laboratory facilities and the building and equipment of sanatoria for the treatment of the tuberculous. This address, I think, was the clarion note in the chorus that aroused the public conscience on public health protection. But since all reform movements come slowly, it was not until 1907, at the historic Gulfport meeting, when the Association spoke in unmistakable tones of command that a

real progressive program was inaugurated. But it was realized that nothing worthwhile could be done unless more liberal financial support should be given the health department, since only twenty-five hundred dollars per year was then being allowed to cover the entire expense of all public health activities. So the five Association members of the Board of Health chosen that year went to Jackson, at their own personal expense, when the 1908 session of the legislature convened, and plead for more money to be used for the public health. A very small increase in the appropriation was made for the biennium, with the understanding that the whole program should be abolished if the Board should fail to make good. The Board decided to use what money there was available in waging a campaign of education before the general public. After casting about for a suitable man to carry the gospel of sanitation and public hygiene direct to the people, Dr. Frederic J. Mayer, of Louisiana, was selected. In my opinion, no better selection could have been made. He was a most entertaining and instructive speaker—one who was not only gifted and fluent, but one who knew his stuff and had the human touch so necessary when something new and worthwhile is to be put across to the people. This campaign was inaugurated in October, 1908. For some eight or ten months Dr. Mayer canvassed the State, visiting every county and almost every community in each county, delivering from two to four lectures every day. These lectures were delivered before schools, churchs, civic clubs and women's organizations. More than one-third of the money appropriated for the biennium was expended on this campaign. No real health work was undertaken, and yet the public was so impressed with the needs and possibilities in health work that the same legislature that had given so reluctantly in 1908, doubled the appropriation in 1910.

So far as I am able to learn this is the first time in history that any State or Government ever went direct to the people with a program or propaganda of this kind. The truths taught—the doctrines promulgated by Dr. Mayer during this campaign were, of a truth, seed sown in good ground and they sprang up and have borne and are still bearing much fruit. Soon after this time Dr. W. S. Leathers was induced by the Board of Health to assume the duties of Chief Health Officer of the State. His splendid work in the dual role of Director of all public health activities and Dean of the Department of Medicine at the University is too well known and too highly appreciated to need discussion further than to say that under his wise and judicious administration, each succeeding legislature was more liberal in financial support than its predecessor. Not only was there more money provided for State-wide public health work, such as the establishment and maintenance of a first class hygienic laboratory and the establishment of a vital statistics bureau whereby the State was admitted into the registration area, but a keen and wholesome interest was built up in almost every county in the State until efficient county and district health departments are functioning throughout the State.

Until 1910 anyone who desired might apply for examination for license to practice medicine, regardless of educational qualifications or medical training. But under the influence and at the insistence of the Association it was then made requisite that all applicants hold a diploma from a "Class A" college. Prior to the development of our very efficient health department, the morbidity and mortality rate was so high in the State that outsiders were loth to invest capital or to take up residence with us. That was true to such an extent that, even now, people are surprised and skeptical when we tell them that among our white population the death rate is lower than in any State in the Nation. But for this As-

sociation we could not claim to have, perhaps, the best equipped and the best administered tuberculosis hospital in the Nation, nor could we point with such pride to our hospitals for the insane and our home for feeble-minded.

I wish I might be permitted to go further into details touching the splendid record of our Association, but it would be unwise and possibly unkind to my hearers. But as satisfying as our record for such splendid achievements may be, let us remember that our opportunities for still better and greater achievements are greater now than they have ever been. In fact, as I see it, there is nothing legitimate or desirable that we may not do. This Association could, if it would, direct the thought, mould the morals, and dictate the legislation of the State. We have about two thousand members. There is no other class or profession in the State that can muster so many men with as much intelligence, education and culture. There is no other body of men that comes into such close touc and intimate relations with all the people. The members of this Association know, or should know, the needs, the hopes, and aspirations of the people as no other group of men does. If this Association will but extend its program, broaden its horizon, enlarge its vision there is no limit to its possibilities to stimulate higher education, to develop a purer, better citizenship, to eliminate poverty, sickness and distress, to lengthen the span of human life and to multiply the joy and happiness in the hearts and lives of our people.

Much apprehension is felt with regard to the outcome of the apparent spread of influence of certain fads and cults. Pensonally, I do not care for this so far as it may affect our profession from a financial standpoint only. For I believe that those who practice medicine only that they may make money, or simply to obtain the means for a livelihood, can well be spared from our ranks. But it is pitiful to see people who really stand in need of conscientious and scientific medical care deluded into the hope and belief that relief may be had through these quacks and impostors. You ask what can be done to relieve the situation? I think that along with every opportunity for doing good there always comes an attendant obligation. One of our many obligations—and perhaps the greatest—is to teach the people, everywhere, the physiology of health, and the nature and etiology of disease. Understanding health and knowing the nature and cause of sickness, the means of prevention is almost always near at hand. If every member of this Association would do his whole duty as a teacher it would not be long until every man and every woman and all children of teachable age would know that most sickness is preventable. They would know that such loathsome and death-dealing sickness as small-pox, typhoid fever and diphtheria can be entirely eliminated from the State. When the people have a true knowledge and correct understanding along these lines you need not be concerned about them who teach or follow these fads and fallacies. When such knowledge becomes universal, as it should, it will almost be a crime for anyone to fall sick of a preventable disease. And until such knowledge does become universal, I believe that we can be indicted for failure to meet and discharge a most sacred obligation; for we have voluntarily assumed the role of doctor of medicine. We ask for fees and rewards. In my opinion, we can not honestly shirk or escape the responsibilities and obligations.

In conclusion, I wish to say that this is a momentous occasion to me; for it is the closing hour of the year of my greatest opportunity to render service to Mississippi State Medical Association, and through it to the people of Mississippi. And yet I feel that I must apologize to the Association and to the people for having done so little. As limited as my ability to do con-

structive work is, I feel that I have not done my very best as I had hoped to do and as I promised I would do. I have discovered that I am a bit lazy and a bit selfish too. I have too often failed to do or to undertake to do certain things that I thought should be done. Sometimes because of the effort required to do them and sometimes because my personal affairs seemed to need my time and thought. But the little that I have done has been cheerfully done because it has been a labor of love.

Then, I wish to say that I fully realize that a great honor was conferred upon me when I was chosen to be the president of this Association. There is no man living in the State whose attainments, ability or brilliance can match this honor. Realizing this fact, I have been puzzled to understand why I should have been so signally honored. I am sure you will believe me when I say that I neither sought nor desired this honor. The only honor I have craved at your hands was that I might be recognized as a loyal and faithful member and that I might have and hold the respect and confidence of the entire membership and that I might feel sure that I had the true friendship and love of, at least, a few of the choice souls among you. I am indeed thankful that I have been given to realize all this. My best friends—and no man ever had better or truer friends—are the men I have met and known in this Association. I pity from the depths of my heart the man who will not give enough of his time and of himself to become fully identified with this Association; for I would not exchange the friendship and love that have come to me through membership in this Association—not to mention the help and development and scientific knowledge that I have acquired—for all the fees and emoluments that have come to me during all the years.

My friends, I salute you and may Heaven smile upon you!

STERILITY: AIR INSUFFLATION AS AN AID IN DIAGNOSIS.*

P. GRAFFAGNINO, M. D.,

NEW ORLEANS.

Sterility is not only important from a medical standpoint, but also from a social aspect; every gynecologist who has been in active practice for a number of years knows that, primary as well as secondary, sterility is on the increase, and that in the majority of cases he is unable to relieve or cure the condition.

I am frank to confess that the present practice of the profession at large, and many of the gynecologists, in ascribing stenosis of the cervix as the cause of sterility, is fallacious in the majority of cases, and that operations for the relief of this condition are not only doomed to fail, but also in a great many instances produce mild and insidious infections which chiefly involve the tubes and if not already sterile these procedures will render them so. Dilatation and curettage, the stem pessary and cutting operations on the cervix cure but few patients. If a woman has a cervical canal large enough to discharge the menstrual flow, the canal is surely large enough for the spermatozoon to pass through. The time has come when most of the operations aimed at the correction of the so-called mechanical cause of sterility should be abandoned, and that operations of any kind, without first determining the condition of the tubes by the various patency tests should be considered pernicious.

The work of Stein and Stewart in this country, reawakening interest in peritoneal gas inflation, followed by roentgen examination, has enabled Rubin of New York to give to the profession the valued Test that carries his name, and he must be given the credit of really adding a new diagnostic point which is definite and cer-

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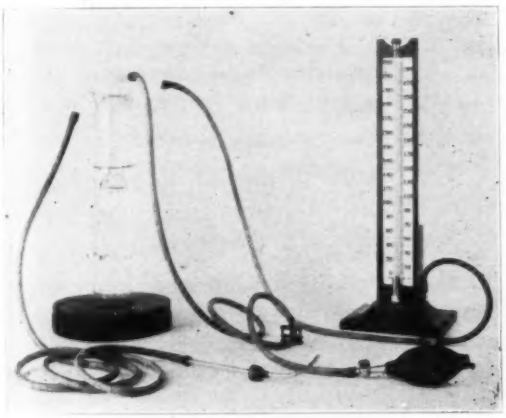
tain if properly carried out and which is of great aid in our study of sterility.

The treatment of sterility is incomplete unless the patient is examined for patency of the tubes. Unfortunately, however, there are a great number of cases in which tubes are patent and, notwithstanding treatment, remain sterile.

More than three years ago a study of Fallopian tube patency was begun at Charity Hospital, using the Rubin outfit-carbon dioxide, as described by him in some of his publications. Since then more than two hundred examinations have been made in the Clinic with this apparatus



Modified Rubin Apparatus.

and we have found that at all times it has given definite information, without any serious complication other than an occasional fainting spell or marked discomfort following a too large injection of gas.

From time to time, as different modifications of the Rubin method have appeared in the literature, we have tried them out in the hopes of finding out some simple portable method that could be used in office, operating room, or patients' home. Most of these methods will give a certain amount of information, are simple, but none of them give the entire satisfaction of the Rubin apparatus, nor do any of them fulfill the requirements that are so essential to obtain the maximum amount of the information from the test.

For the past few months, we have used a portable modification of the Rubin apparatus that meets all these requirements, i. e.

1st. That a constant low pressure of gas or air can be automatically maintained.

2nd. The rate of flow of the gas or air can be accurately regulated.

3rd. The volume of gas or air which passes into the abdomen can be measured.

4th. Intrauterine pressure can be recorded by means of the mercury monometer.

By the illustration you will note that all that is required for this apparatus is a siphon flow meter and a regular blood pressure apparatus added to the perforated intrauterine cannula. The rubber ball of the blood pressure apparatus forces the air through the siphon flow meter, through the cannula into the uterus and Fallopian tubes and, if patulous, into the peritoneal cavity. The mercury column of the blood pressure apparatus records the amount of pressure used to force the air through.

In the study of our cases we have classified them as patent, partially occluded, or occluded, according to the level of intrauterine pressure at which the gas or air passes through the tubes into the abdomen. These levels as suggested by Rubin are:

1st. If gas passes into the abdomen at an intrauterine pressure below 150mm. the tubes are considered patent.

2nd. If a pressure of 150mm. or more was required before gas passed into the abdomen the tubes are classified as partially occluded.

3rd. Manometer readings of 200 mm. on repeated trials are considered to be occluded.

THE TECHNIQUE.

The examination must be carried out under the most rigid aseptic precautions. The patient is examined in the lithotomy position. The vagina and cervix are carefully cleansed; the latter is exposed by use of weighted vaginal speculum or bivalve speculum. The cervix and cervical canal are painted with 3½% iodine, the anterior lip is grasped with vulsella or bullet forceps, leaving the cervical canal unobstructed, the sterile intrauterine cannula is inserted (it is a good thing to get the direction first with a sound) into the canal. The rubber syringe tip which has been placed over the end of the cannula is made to fit into the canal as firmly as possible by gentle downward traction of the cervix with the vulsella. The apparatus is now connected and the air pumped slowly so that it takes about twenty seconds for the column of mercury to rise from zero to 100 mm. The volume of air which has passed into the abdomen can be easily measured by counting the number of pulsations or excursions of the air in the siphon flow meter. 40 c.c. of air pass into the abdomen with each excursion; not more than 300 c.c. of air should be introduced, as it is absorbed very slowly often remaining over 48 hours and gives rise to very distressing pressure symptoms, especially if the patient endeavors to get about.

We have three ways of knowing whether air has passed into the abdomen during examination:

1st. Pressure findings: A drop in the intrauterine pressure during the examination, if there has been no leak around the cannula in the cervix, means that air has passed through one or both tubes; an intrauterine pressure of 200 mm. on repeated trials indicates that both tubes are closed.

2nd. Shoulder pain: As soon as the patient assumes the upright position she may have pain in one or both shoulders. This symptom is present in over 90% of the cases in which the air has passed into the abdomen and is very positive evidence that tubes are patent.

3rd. Fluoroscopic examination: If a patient is examined in the upright position with the fluoroscope after the air has passed into the abdomen, a layer of air can easily be seen beneath the diaphragm.

Dangers: The chief risk is that of blowing infected material into the peritoneal cavity and peritoneal shock, therefore, do not use in the presence of profuse purulent or bloody discharge. Acute or subacute pelvic inflammatory disease or serious organic disease are absolute contraindications.

The best time for examination is between the menstrual periods.

SUMMARY.

1. The Rubin method, or its modification, for the determination of tubal patency is a simple, safe, diagnostic procedure.

2. If details of technique are carefully controlled we can form a definite opinion as to the condition of the tubes in approximately 85% of the cases examined.

3. All cases of sterility, in which a definite diagnosis of the cause cannot be made by bimanual pelvic examinations, should be insufflated.

DISCUSSION.

Dr. E. L. King (New Orleans): Dr. Graffagnino spoke of the tests of the air passing through the tubes: I should like to ask Dr. Graffagnino if he uses the stethoscope over the symphysis. By placing a stethoscope in this location you can hear the air gurgling out of the tubes.

This is used in addition to the mercury manometer.

Dr. Lucien LeDoux (New Orleans): The technique as presented by Dr. Graffagnino is interesting and should be used as an aid in our diagnostic procedure in cases in which we attempt to make a diagnosis in regard to sterility.

Dr. Graffagnino mentioned that in 90% of the cases after the air has passed into the abdomen, there is pain in one or both shoulders. Many of us know what produces this but I believe the doctor should explain how this is produced.

Dr. H. W. Kostmayer (New Orleans): I want to say, in connection with Dr. Graffagnino's paper, that it would be a grave mistake to adopt his dictum regarding the perniciousness of considering anything in the way of operative or instrumental relief of sterility. Even granting that the patency of the tube or tubes is demonstrated, sterility very frequently still exists.

I have had some very gratifying experiences, during a great many years, with the use of the Outerbridge pessary and, occasionally, the stem pessary. I saw a lady in the office today who is about 5 months pregnant. She was married some ten years, without children, and had, at the hands of someone else, an ovariectomy done some 5 years ago. One year ago she started wearing the stem pessary. The pessary was removed about June 15th and that patient conceived very shortly thereafter. It seems more than a coincidence that, after 10 years, conception should supervene so soon after the removal of the stem pessary. There are some cases where the Outerbridge pessary is employed in the office.

I wish to commend this method of diagnosis also as valuable, but I feel that we still have to consider the possibility of obstruction of the cervix, not always of the tubes, as the cause of sterility.

Dr. P. Graffagnino (closing): In answer to Dr. King's question: we have used the stethoscope, but we find it simpler to watch the mercury column.

In regard to shoulder pain: the phenomena is simple enough. The patient is in the recumbent position; when that patient stands up the air rises and causes pressure symptoms, referred to one or both shoulders.

In regard to Dr. Kostmayer's discussion: I believe that I said, in my paper, that we consider some operations pernicious, if the case has not been thoroughly studied. It is not fair, without a study of the case, to submit the patient to a uterine operation. There is no question but that some operations are of value, but the case should be thoroughly studied and given every chance before operating.

GALL-BLADDER DISEASE—ITS METABOLIC ASPECT.*

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NEW ORLEANS.

The relationship that exists between gall-bladder disease and deranged food metabolism has been established through clinical observations of numerous cases and experimental studies on animals. Because of improper metabolic action of the gall-bladder on certain constituents of the bile, pathological conditions have developed. The constituent of bile that plays the greater role in this abnormal phenomenon is a lipoid, cholesterol. The quantity of bile cholesterol is dependent on the amount of cholesterol circulating in the blood. The latter in turn varies with the diet of the individual, the addition of fat to the diet definitely produces an increase in blood cholesterol. Clinically, these changes were carefully noted by Wilensky and Rothschild in their studies on cholelithiasis. Experimentally, the positive influence of diet rich in fat on the bile cholesterol was conclusively shown by Rous and McMaster.

The manner in which the gall-bladder metabolizes the cholesterol is of considerable interest in connection with a discussion of gall-bladder disease. Certain solid substances had been demonstrated to pass into the gall-bladder mucosa and subsequently into its wall because of epithelial cell absorption. This phenomena suggested that lipoids such as cholesterol might undergo the same action. On the other hand some workers were of the opinion that the cholesterol was excreted by the gall-bladder mucosa. By the injection into the gall-bladder cavity of highly emulsified milk fat, deeply stained orange with Sudan III, Mentzer demonstrated multiple discrete masses of the minute Sudan-stained globules in the

*Read before the Orleans Parish Medical Society, February 8th, 1926.

epithelial cells. Mentzer believes that his experimental work represents the first positive evidence to substantiate the actual absorption of lipoid material by the epithelial cells of the gall-bladder mucosa. This passage of the lipoid through the cells is considered a metabolic process. A disturbance of such metabolism does result in incomplete passage of the substance, cholesterol, through the mucosa and consequently there are accumulations of the substance in the gall-bladder. These deposits characterize the pathological conditions known to the surgeons as strawberry and papillomatous gall-bladders.

The present communication is an attempt to evaluate the blood cholesterol findings for the diagnosis and treatment of bile tract disease from a clinical study of a series of cases. In this group of one hundred patients, with blood cholesterol determinations fifty, were considered either clinical or pathologically proven cases of cholecystitis. Of the fifty cases of cholecystitis there are varying degrees of involvement from mild chronic inflammations to severe conditions with gall-stone formation.

In several instances of low-grade disease, existing over long periods, but without manifesting any definite evidence of marked gall-bladder pathology, the metabolic studies gave some interesting information.

The following cases are briefly cited to represent this group:

A male, age 50, was jaundiced twenty-five years ago. For this long period he has suffered with indigestion, pains in the region of the gall-bladder, severe headaches. On physical examination, the liver was enlarged and he appeared sensitive to deep pressure over the gall-bladder region. The duodeno-biliary drainage showed numerous pus cells in the bile specimens. Visualization of the gall-bladder with tetraiodophenolphthalein sodium salt revealed a normally functioning organ. On April 28, 1925, the blood cholesterol was 236 mg. per 100 c.c. and the serum bilirubin was 1.6 units. During the following three months, this patient remained on a fat free diet and took sodium phosphate in the morning. On December 12, 1925, the blood cholesterol dropped to 167 mg. and the serum bilirubin to 0.65 units.

The second case is very similar but had not existed for as long a time. A male, 40 years old, had some tenderness under the right costal arch, belching, heartburn and headaches more or less over a period of twenty years. His bowels were chronically constipated. He had typhoid fever at the age of 10. On October 29, 1925, he was examined. His weight was 153 pounds. He was quite sensitive to pressure over what is ordinarily known as the gall-bladder region. The gastric analysis showed an achylia gastrica. Visualization of the gall-bladder showed normal outline, position, size and function of the organ. The blood cholesterol was only 160 mg. per 100 c.c. However, on a fat free and low protein diet, within two months, the blood cholesterol was reduced to 125 mg. He gained 10 pounds in weight and was greatly improved symptomatically.

In contrast to the good results obtained in these cases, which represent the milder group, I shall cite the metabolic findings in gall-stone disease and the difficulties encountered even with the aid of the essential surgical measures.

In a group of eight cases with cholelithiasis, the blood cholesterol readings varied from 241 mg. to 334 mg. per 100 c.c. The detail study of the following case, before and after operation and subsequent medical treatment, including dietary restriction, presents a possible relationship between severe biliary tract disease and persistent abnormal cholesterol metabolism:

A woman, age 50, had a cholecystostomy for stones eight years previously. At the time of examination, she would have typical gall-stone colic. The blood cholesterol was 252 mg.; measured during the attack, it was 275 mg. Non-surgical drainage of the bile tract revealed a small quantity of black thick bile containing mostly cholesterin crystals. At operation, cholesterin stones and cholesterin crystals were found in the gall-bladder, which was drained. She was placed on a low-fat diet but one year later the cholesterol in the blood remained high, 256 mg. The patient continues to have gastric symptoms and pains in the region of the gall-bladder.

Wilensky and Rothschild state that in 16.5 per cent of their post-operative cases "the dominant and sole cause for the recurrence of symptoms is an underlying disturb-

ance of the cholesterol metabolism." In their series, the amount of blood cholesterol varied from 200 mg. to 300 mg. per 100 c.c. blood.

In certain cases with definite infection of the gall-bladder associated with hypercholesterolemia, without stones, operation on the gall-bladder may not alter the metabolic phase. After cholecystostomy and drainage for four weeks, a septic condition caused by a B. coli subacute cholecystitis was greatly benefitted. However, the digestive symptoms persisted. The blood cholesterol reading was 266 mg. on Oct. 27, 1924. After the lapse of over one year, during which period she was on a fat-free diet and non-surgical biliary drainages, the blood cholesterol returned to normal, 168 mg. per 100 c.c. blood.

The cases with jaundice of varying degrees showed considerable variation in the cholesterol content. One of the highest readings in the series occurred in a biliary tract infection with subacute cholangitis. In two cases of obstructive jaundice the blood cholesterol remained within practically normal limits, 200 mg.

In pregnancy, the blood cholesterol is increased. I have found it somewhat difficult to reduce this condition where there is an associated cholecystitis. During pregnancy, one case showed a reading of 267 mg. One month after delivery, the quantity dropped to 213 mg. while the pain and gastric symptoms persist.

SUMMARY.

From the above studies, it was found that the blood cholesterol is usually increased above the normal in cases with bile tract disease. The cholesterol is reduced in quantity with the subsidence of symptoms in so-called mild degrees of involvement by restricting the fats in the diet.

In cholelithiases and severer grades of gall-bladder disease, persistence of symptoms after surgical and medical treatment may be associated with a disturbance of the cholesterol metabolism.

The blood cholesterol is not in proportion to the degree of jaundice or to the function of the liver. In obstruction of the common bile duct, even for a short period, the blood cholesterol may become normal.

DISCUSSION.

Dr. W. Denis (New Orleans): The fact that many gall-stones are almost pure cholesterol, is I think largely responsible for many of the attempts which have been made to trace out some connection between high blood cholestrol and the incidence of gall-bladder disease. About fifteen years ago there appeared in the French periodicals a large number of communications on this subject, in many of which the authors attempted to demonstrate the importance of blood cholesterol determinations, and in fact in some cases even went so far as to advance the view that a diagnosis of certain types of infections of the gall-bladder might be made by means of blood cholesterol determinations. More accurate methods of blood analysis which have come into use in the last few years have given results which indicate that in many cases the French observers were somewhat too optimistic.

We now know that we get high concentrations of cholesterol in a number of clinically unrelated conditions, as for instance in diabetes in certain types of nephritis, in pregnancy, beginning in the second or third month, and continuing for some weeks after delivery, and in high fat feeding.

On the other hand we get low blood cholesterol in fevers, in pernicious anemia, and occasionally in secondary anemia, and in the case of persons living on diets low in fat.

In this country, within the past five or six years, Rothchild of New York has published several papers in which he has sought to connect high blood cholesterol with gall-stone disease.

This work has roused renewed interest in the subject, and with proper attention to detail it is possible that work on this problem may prove worth while. I feel that the plan of investigation adopted by Rothchild, and by Silverman (of following the patient for many months) is the only one which is likely to lead to definite results. Far too many and too far reaching deductions have been arrived at by investigators who have gone out, collected large numbers of blood specimens from hospital patients, had these samples analyzed for cholesterol, and then proceeded to draw conclusions without reference to diet, intercurrent infections, pregnancy or

other factors which in themselves have a profound effect on the level of blood cholesterol.

Dr. Emile Bloch: For a man doing surgery it is very difficult to discuss a paper on this subject after a physio-chemist and a gastro-enterologist have discussed it. I have been investigating this subject for the past six months and have tried to draw a parallel as to etiology between gall-stones in the colored and white race. I have reviewed much literature on etiology and chemistry of blood and bile. Metabolism of bile is a factor as is stagnation, etc.

From the standpoint of chemistry, Dr. Denis has told you that cholesterol is not found in the vegetable kingdom but the phytosterols are and they cause an increase of cholestrol in the blood and bile.

In the colored race we do not get gall-stones except in rare instances. Dr. Silverman has not considered the subject of bilirubin, for the reason that bilirubin stone is not as commonly found as cholestrin. If you read the experimental work of Rous, McMaster and Drury they show the stones found are either Calcium Carbonate, Calcium Bilirubinate or combined. Rothchild and Wilensky claim experimental work on dogs in relation to Cholesterol is useless as the cholesterol is too readily executed. In the negro, as far as we can find, the calcium bilirubinate is the most commonly found stone. Sir Berkeley Moynihan and his co-worker, Dr. Cecilia Shiskin, endeavor to show the relation of cholesterol to calculi, as Dr. Silverman has tried to tonight. Dr. J. C. Campbell of London in citing their work claims they didn't specify whether their cases were jaundiced at time of estimations.

The most recent work is from Chiary of Paris, France, in which he says that the amount of soluble cholestrol in the bile is not modified in visceral diseases without liver changes and not even in affections of the gall-bladder except cholelithiasis. The usual decrease of soluble cholesterin in the bile was not always present with gall-stones. This fact may be explained by the formation and the stage of mechanical and infecticus complications.

Therefore through my investigation to date which I have summarized in an article which is to appear in the future, there is no conclusive evidence in cholestrol estimation in Gall-Bladder Disease.

Dr. D. N. Silverman (closing): While it is with great difficulty that conclusions are to be drawn from blood cholesterol findings alone, I have tried to show that many cases of gall-bladder disease are associated with increased amounts of blood cholesterol. Improvement in the condition of such cases is often paralleled by a return to normal of the cholesterol.

It has been proven that the concentration of the cholesterol in the bile, which is in turn dependent upon the blood content of this lipoid, is a factor in the formation of cholesterin stones. In such instances microorganisms are not essential as a nucleus for the deposit of the stones, nor is a previous infection of the gall-bladder a predisposing cause. Experimentally, Rous and McMaster were able to produce gall-stones in the presence of stasis and increased concentration of cholesterol in the bile. They showed that diet rich in fats played an important role in determining the ultimate results.

INTRAVENOUS MERCUROCHROME IN UROLOGY.

H. W. E. WALTHER, M. D.

NEW ORLEANS.

The enthusiastic reception accorded chemotherapy as an adjunct in combating hematogenous infections forces upon us the conclusion that it must possess some merit. Beginning with the work of Churchman and Herz[1] on gentian violet and ending with the observation of Young, White and Swartz[2] on mercurochrome, the intravenous use of dyes, in treating obstinate infections, has slowly but surely been gaining ground. Mercurochrome intravenously is being employed, in an experimental way, in practically all types of infection. And whereas brilliant results are frequently noted following its use, a certain fixed group of cases remain uninfluenced by its use. In my own experience mercurochrome fails to benefit some 33 per cent of cases. It is far from being a cure-all. Why strikingly successful results should be noted in some cases and failure in others, no one has yet explained. Furthermore, the exact means by which a given dye acts upon an infection also remains unexplained. It is hardly likely that a dye injected into a vein remains in the circulating blood very long. Churchman measures the time in seconds, not hours. It does not seem to

him that the dye *per se*, in the strength in which it is used, is capable of the results often achieved. He rather inclines to the hypothesis that the dye is changed in the body into a substance more potent than the mother substance. It is possible that the dye may stimulate the tissues to produce antibacterial substances, though there is no proof that this actually occurs. Churchman adds, however, that while in the blood stream the dye is carried to certain organs where it remains in some concentration for a fairly long period of time.

From the foregoing it can be seen that much work still remains to be done before our knowledge on the subject can be considered adequate. It still remains for some one to devise "possible means of harmonizing the apparent conflict between experimental results and clinical observation."

My interest in the use of mercurochrome intravenously began with my visit to Dr. Hugh H. Young, at the Brady Urological Institute, Baltimore, in 1923. At that time he had used the dye in a number of hopeless septicemia cases with gratifying results. Upon my return I began administering it extensively and at a Staff Meeting at Charity Hospital, in December 1923, I presented several cases of multiple arthritis and of chronic pyelonephritis which has responded to intravenous mercurochrome. The presentation brought forth little comment and little interest was accorded the suggestion. Some of the interns began to use it, employing unusually large doses, with subsequent violent reactions. It is a grave misconception to believe that with mercurochrome a reaction is necessary in order to attain results. Its action is far from being analogous to that of a foreign protein. From the beginning, I feared the large doses proposed by Young (5 mg. per kilo of body weight) and have adhered to doses of from 2 c.c. to 10 c.c. of a freshly prepared 1 per cent aqueous solution. If results are forthcoming, they will occur as promptly with the small dose as with one incompatable with the safety of the individual.

During a period of a little over two years I have treated with intravenous injections of mercurochrome 768 cases. The conditions for which the injections were given comprise cases of gonococcal prostatitis, non-specific prostatitis, gonococcal epididymitis, gonococcal arthritis and pyelonephritis. In addition to the intravenous therapy all patients received the routine care usually given such cases, including diathermy when indicated, and locally solutions of mercurochrome and silver nitrate. I am convinced that a large number of these patients were materially benefitted by the dye intravenously and that its employment appreciably shortened the duration of infection. Table I gives the results as regards cases treated of each group, the number which were improved as well as those which showed no improvement:

TABLE I.

Cases Treated with Intravenous Mercurochrome.

CONDITION	Cases Treated	Improved	Not Improved
Gonococcal prostatitis	482	312	170
Non-specific prostatitis	112	76	36
Gonococcal epididymitis	66	18	48
Gonococcal arthritis	22	19	3
Pyelonephritis	86	27	59

It is my routine to give, as an initial intravenous injection, 2 c.c. to 5 c.c. of a freshly prepared 1 per cent mercurochrome solution. In many cases the dose is never increased above 5 c.c. In refractive cases, at the second injection, we give 7 c.c. Later doses of 10 c.c. may be given. Rarely have we given, in office practice, more than 10 c.c. The injections are given every second or third day. Some patients have received but a single injection; others have received as many as fifteen. Even mild re-

actions are uncommon. It should be insisted upon that solution be freshly prepared and given warm (boiling of the solution is unnecessary and should be avoided). Make sure you use the drug marked "for *intravenous injection*" and not the less refined preparation that is used locally. The urine is checked daily for albumin and casts. The urine of patients in which mercurochrome has been administered intravenously will show a light pink tint twenty-four hours after an injection. Although this will not be observed in every patient, it is noticed in a large proportion of instances.

The claim of St. George[3], that mercurochrome intravenously produces a mercury nephritis in every patient, is not in accord with our experiences. True, we do not administer the drug in as large a dose as is customary in most clinics. With the doses above enumerated, we feel that no harm whatever can accrue for its use. I have never given it in advanced cases of nephritis and would hesitate to use it in any patient in which the 'phthalein reading was low.

To reiterate, I wish to state that my experiences with intravenous mercurochrome in urology convince me of its value, particularly in the treatment of those cases which fail to respond promptly to the accepted methods of therapy universally employed. Small doses, frequently repeated, will give satisfactory results and are not injurious. I feel that by its aid a large proportion of patients can be benefitted. As an adjunct to our armamentarium for combating infection it has an established place.

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DIARRHEA.*

F. S. HILL, M. D.

GRENADA, MISS.

Diarrhea occurs as a symptom of many conditions. It results from irritation of the intestinal tract by improper foods or by drugs. It occurs when absorption of water is poor, due to either functional inactivity of the intestinal mucosa or to the presence of hypertonic salt or sugar solutions in the intestines. It is also caused from an increased irritability of the gastro-intestinal tract due to some outside infection, such as pneumonia or otitis media. A similar condition is produced when external temperatures are too high and the infant clothed too warmly.

In none of the conditions above mentioned are there any actual anatomical lesions in the intestines. There is no real enteritis. However, there are specific diseases that do cause lesions, namely, typhoid and dysentery. The forms of diarrhea considered here are the ones attributable to decomposition of food in the intestinal tract. There are many names given this type, such as acute intestinal indigestion, fermented diarrhea dyspepsia, summer complaint, gastro enteritis, cholera infantum. The last term is the most severe type of the disease. The term "acute indigestion" is about as satisfactory as any proposed.

In making use of this type we do not mean to imply that the diarrhea is necessarily due to the failure of the intestines to digest food, or that the presence of the undigested or unabsorbed food in the stools is characteristic of the condition. If spoiled milk is decomposed or partially decomposed by bacterial action diarrhea may result. This occurs quite frequently in infants fed on raw milk. Sour milk may give rise to no symptoms whatever. Evidently certain bacteria are capable of decomposing milk, with a formation of diarrhea producing

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substances more readily than other bacteria. It is known that certain acid producing organisms, such as bacillus Bulgaris, produce relatively harmless substances by their action on milk. In fact the chief product of their action, lactic acid, seems to exert a marked inhibitory effect on the growth of harmful organisms.

It is not definitely known what micro-organisms are responsible for the production of diarrhea. It is probable that a large variety of organisms are capable of setting up the condition. Organisms which are known to be present in the intestinal tract may become so abundant as to provoke a disturbance. The B. Coli is a normal inhabitant of the lower intestinal tract, but this organism does not flourish in the upper intestinal tract. When food is given which is badly contaminated or when the functional activity of the upper intestinal tract is affected the B. Coli is found in large numbers, and it is quite conceivable that this organism is the offending one. However, the same thing may be said of various other common organisms.

The conditions which favor the production of diarrhea are:

1. The presence of bacteria in the upper intestinal tract.

2. The presence of a suitable culture medium.

3. A diminished amount of secretions of the intestinal tract which have an antiseptic effect.

4. A hyper-irritable intestinal tract.

Diarrhea may result from other causes than the action of bacteria on food. Strong sugar solutions have a laxative effect and high fats seem to cause some mechanical disturbance. A high fat of cow's milk many times will bring about intestinal peristalsis. If the foregoing considerations are borne in mind we can understand why diarrhea occurs under certain conditions. Sterile milk may sometimes cause a diarrhea, due to the fact that too large amounts are given and bacterial action takes place before the intestine can handle it.

Protein is not a favorable culture medium for bacteria which are associated with diarrheal diseases in infancy and is not a common cause of these diseases. Parental infection is not an unusual cause and may come up in the course of any infectious disease, such as pneumonia, otitis media, and pyelitis. High fever may cause intestinal irritation because the food cannot be handled properly.

The stools in acute intestinal indigestion may be as many as ten or fifteen a day. The contents are hurried rapidly through and absorption is poor. The stools are very watery and there are many shades of green in them, due to bile coming through unaltered. There are many small, irregular curds found throughout the stools, caused by the calcium and magnesium soaps passing through. The fats and sugars which have escaped absorption in the upper intestinal tract are broken up by bacteria in the colon. The fats escape digestion and are found in the stool as small globules. There may be quite a little mucus in the stools and blood may appear, due to increased intestinal peristalsis. Fever is very slight, but when it continues high an infectious diarrhea should be suspected, or other causes looked for.

The most serious consequences of infantile diarrhea are starvation and water loss. The starvation is due to inability to absorb a sufficient amount of food to cover requirements, and the water loss to a large amount of water passing out through the stool, which creates a rather serious condition known as anhydremia.

The treatment of diarrhea begins with prophylaxis. Children should not be overfed either on breast or bottle, more especially so in hot weather. Their quarters should be well ventilated. In case of artificially fed infants the milk should be always boiled and kept on ice, or in a cool place, to prevent contamination. Con-

densed milk should not be fed to infants. It is not a sterile food and has not the proper qualities. Infants should always be given plenty of water, more especially in warm weather.

When gastro-intestinal indigestion or diarrhea has begun one should take the infant off of milk or food from 12 to 24 hours. During this period of time it should be given cereal dilutions, that is to say, barley water or rice water or weak tea solution. At the end of that period if the diarrhea has cleared up to some extent the infant may be given small amounts of breast milk, or put on a protein milk similar to the original eiweis milk of Finkelstein's. They usually clear up on this in a few days and there is enough nourishment in it to supply the food requirements of the body.

If the bowel is very active it is useless to give cathartics, such as castor oil and calomel. The bowel is emptying itself and such purgations only increase the irritability of the intestines. However, if the bowel is not very active and there is reason to think the child has been taking improper food or there is decomposition taking place in the intestinal tract, it will be well to give an initial dose of castor oil. Calomel should never be given because it is believed that irritation from its use does more harm than good. During the starvation period it is sometimes difficult to get the child to take enough water. In this case it is well to add from a quarter to a half grain of saccharin to a pint of water. The effect of starvation on the disease is often striking. The stools diminish in number and become smaller in volume. Mucus, however, remains for some time, but in less abundant amount.

Unfortunately all infants do not respond to the above treatment as soon as we would like. The bowels remain very active and there appears to be quite a little tenesmus and pain. In some cases it will be necessary to give an opiate to quiet down the peristalsis. I know of none better or that answers the purpose quite as well and does as little harm as paregoric.

I never allow the starvation period to go over 48 hours at the most. If the starvation period is too long there is danger of a starvation diarrhea keeping up the condition. Food should be instituted cautiously as soon as possible. Marriot thinks lactic acid milk, skimmed, is one of the best foods to give an infant after the starvation period. Such milk can be fed in larger amounts than other milks, without giving rise to diarrhea. The explanation of this is probably the fact that other organisms do not grow well in milk inoculated with the lactic acid bacillus. This has been demonstrated in the test tube. It is not certain how long lactic acid organisms live in the intestinal tract; certainly most of them are killed off and do not appear in the stool. It is probable that they live for considerable time in the upper intestinal tract and die off after food which serves as their culture medium has been absorbed. If the presence of lactic acid milk will prevent harmful bacterial action for only the portion of time that the food is in the intestinal tract this would be a distinct advantage and the evidence is that such is the case.

It is useless for me to tell you how to make lactic acid milk, as I feel that you are all familiar with same. However, Mead and Johnson are putting up a preparation of this milk that is very satisfactory and saves a lot of time and trouble in making the milk.

When diarrhea occurs in very young and poorly nourished infants starvation is dangerous, and lactic acid milk is the best form of food to use at the beginning of the feeding. When this is unobtainable buttermilk may be used. Protein milk, as mentioned before, is a lactic acid milk and is essentially a mixture of buttermilk and cottage cheese. It has a caloric value of 13 calories per ounce, a little more than commercial buttermilk. Its high protein content makes it desirable on account of its food value and knowing that proteins cause very little

trouble. The presence of lactic acid organisms prevents the further growth of harmful germs. The details of the preparation of this protein milk are given in all standard text books—see Holt & Howland, 7th edition, page 161. The preparation that I have found very satisfactory is the one put up by Louis Hoos & Co., Chicago. It comes in small packages, and one package to the quart of water which has been previously boiled and one ounce of dextrin makes it ready for use. In young infants it is not well to add the dextrin or any sugar for several days, but after this period it should be added to help nourish the baby. When the diarrhea has subsided and the stools have assumed a soapy character sugar may be added.

In the case of infants in whom diarrhea tends to recur frequently it is best to give a formula similar to that which a normal child at the age would be receiving. In this case whole lactic acid milk in the proper proportions may be used. When there is very much blood in the stools resulting from a prolonged attack of diarrhea and the condition takes on the appearance of an infectious diarrhea, argyrol in a ten per cent solution, given a teaspoonful every three hours, seems to give excellent results. However, I never keep them on this over three or four days, then a period of rest of three days and begin again. The argyrol may be given in the bottle of milk. The object in giving argyrol is not in giving an intestinal antiseptic, but to make a poorer culture medium in the intestinal tract with the lactic acid bacilli to further inhibit the growth of harmful organisms.

"QUINIDIN AND OUABAIN IN CERTAIN CARDIAC DISEASES."*

CHAILLE JAMISON, M. D.,

NEW ORLEANS.

That quinine can slow the heart was known as early as 1853, but it was not until 1914 that Wenckebach accidentally found that it abolished auricular fibrillation. In 1917 Hecht reported cases of complete arrythmia and of extra-systoles favorably influenced by the intravenous injection of quinine. No further observations appear to have been made until Frey in 1918 proposed the use of the dextro-rotary isomer of quinine, quinidin, instead of the alkaloid itself. Comparative clinical studies of the action of the different alkaloids on auricular fibrillation had shown him that quinidin had remarkable action in regulating certain abnormal cardiac rhythms. Quinidin and its salts exert a specific action on the myocardium, and especially on the conduction system and the cardiac nerves. It retards the rhythm of the sinus node and diminishes the conducting power of the auricular myocardium. It is generally accepted that auricular fibrillation and auricular flutter are due to the "circus movements" which result from a circular contractile movement that travels indefinitely, and without pause, around and around the wall of the auricle; since quinidin diminishes conductivity in the auricular myocardium and prolongs its refractory phase, it will establish a barrier that the contractions of the circus movements cannot pass. Under these circumstances, the normal pacemaker, the sinus node, regains control of the auricular contraction and the normal rhythm is suddenly restored. The normal control thus established may be permanent or may only last as long as the myocardium is under the influence of the drug. It appears that quinidin restores the normal rhythm promptly, while it is known that digitalis restores a normal pulse, largely by the production of heart block, and that when the normal mechanism is restored by digitalis, this result comes about only slowly. The latter drug appears not to bring about a return to normal but to substitute one abnormality for another.

The indications for the use of quinidin are auricular fibrillation, auricular flutter

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and paroxysmal tachycardia; it is my belief that when these conditions are found to exist, quinidin is always worthy of a trial. Brilliant results are to be expected in all early cases; these results are at times even marvellous, the patient suddenly becoming aware that the heart has resumed its regularity; his sense of illness disappears, and he returns to perfect health. In long standing cases of auricular fibrilation, and particularly in those cases that have had repeated attacks accompanied by heart failure, the good results are present only in about fifty percent of cases, but when these good results do occur, the benefit to the patient is very great, compensation often being promptly restored, and in those cases in which it fails, no harm seems to be done. Where valvular lesions are present, the drug is of great value in restoring normal rhythm, though in such cases the percentage of its failure is even higher than in those with simple failures. It has been stated in the literature that the use of digitalis did not permit the use of quinidin; this seems to have been a hasty conclusion, and I feel that it is perfectly safe to give the drug immediately following digitalis medication, or even in conjunction with it. Leconte and Vaquez advise preceding the use of quinidin by a course of digitalis or ouabain. Since the earlier fibrillation is treated by quinidin, the better the results to be expected, it follows that all cases of cardiac disease should be carefully watched for the onset of fibrillation and quinidin administered promptly. This applies particularly to mitral stenosis. As this irregularity often precedes the graver forms of failure, more serious failure may be thus warded off for an indefinite period.

The administration of quinidin, as we understand the treatment at the present day, is merely a matter of routine rule. A dose of three grains is given to determine the presence of idiosyncracy of the patient to quinidin. In four to six hours, if no ill results have followed the preliminary dose, five grains of the drug are given every four hours during the day for an indefinite period, though it has been my experience that if the normal rhythm has not been re-established within four days, its continued administration is useless. It may be tried again after a lapse of a week or so. Crummer notes that achylia is frequent in types of individuals who develop fibrillation, and that it is wise to examine the gastric contents before starting treatment. We have known for many years that this fact often hinders the successful use of quinine in malaria, and it may also explain a high percentage of the failures of quinidin in fibrillation. This is an extremely interesting point which I have not yet had the opportunity to try out in practice.

It is stated that quinidin may cause death occasionally and that such deaths are sudden; that they occur at the time the normal rhythm is re-established, and that they are due usually to cerebral emboli which are swept out from the auricle in which clots have formed during its period of fibrillation. A great deal was heard of this danger when the drug first came to general notice, but recently I have seen no reference to it, although the use of the drug must now be very general. Other toxic effects of quinidin are exactly similar to those of quinine, and are too well known to require description.

My first experience with quinidin was about five years ago, and the result was so remarkable that I at once became interested. A medical student, 23 years of age, consulted me for an extremely irregular heart beat, accompanied by dyspnoea and discomfort in the precordium, which had appeared suddenly the night before. Dr. Garrey made an electrocardiographic tracing which demonstrated typical auricular fibrillation. Quinidin was administered, and after the second dose the normal rhythm was suddenly re-established and all symptoms promptly subsided. A subsequent electrocardiagram was normal. I

have lost track of this patient recently, but his condition was normal for several years.

OUABAIN.

Strophanthus has been known to have a marked effect on the heart since its first introduction to clinical medicine. The uncertainty of its action and its marked emetic effect have tended, very justly, to discredit its use. In 1869 Fraser isolated a glucoside, strophanthin. Heretofore, two kinds of strophanthin have been utilized; the amorphus strophanthin extracted from strophanthus hispidus and from strophanthus kombé, and the crystallized strophanthin derived from one or the other of these plants, and also from strophanthus gratus. Strophanthin was studied anew in 1906 by Fraenkel, who described its marvellous effects in the treatment of advanced heart failure. His results were confirmed by many investigators, but it was also shown that serious accidents, and even sudden death, only too often occurred following its use, especially by the intravenous route. Its use was then largely abandoned, and many felt that it was a dangerous drug which should be banished forever from clinical therapeutics. Vaquez was so impressed by the good results obtained from the use of strophanthins, that he determined to investigate reasons for their toxic action, and to find a substance that would retain the undoubted high therapeutic value without the dangers demonstrated to exist in the strophanthins in general use at the time. It soon became clear to him that the dangers depended on the circumstance that the toxity varied according to the manner in which the strophanthin was prepared, and the substances from which it came, and that the preparations were not constant in either activity or toxicity. Arnaud, a Parisian chemist, attacked this problem and finally succeeded in isolating a perfectly crystallized substance of remarkably uniform activity and low toxicity; this substance he named ouabain, and it was derived from strophanthus gratus. Vaquez states that this was the remedy he sought and that it possesses all of the advantages of strophanthin with none of its dangers, and adds that he has given over 2000 injections, without seeing any serious mishaps, much less any deaths.

There is some controversy regarding the pharmaco-dynamics of strophanthin. Many of the most competent pharmacologists, (among them our own distinguished Professor of Pharmacology, Dr. Halsey) maintain that the action is identical with that of digitalis. Bastedo states that one of the marked differences between the pharmacological action of the two drugs is to be found in the fact that the strophanthins do not constrict the coronary artery, while digitalis does so. Vaquez states that there is no action on the blood vessels, and cites the researches of Fraser and Langgard and of Otto Vogt to support this contention. The effects of strophanthin appear to be exerted exclusively on the myocardium and the muscle fibers and it is maintained that it has no effect on conduction, and it is stated that excitability is not effected.

The majority of careful observers have concluded that digitalis has not a happy effect when used in aortic regurgitation, and many feel that it is often actually harmful in this condition. In the male negro service at the Charity Hospital, where aortic regurgitation is so common, and also the large fatty heart due to syphilis, this observation has been concurred in by nearly all of those who have conducted this service. My own experience in these wards, which has extended over some fifteen years, leads me very definitely to conclude that digitalis is rarely of any value in such cases, and is actually extremely detrimental in many of them. Since these conditions are admittedly among the most serious forms of cardiac disease, it appeared imperative to find a drug which might be of help. Dr. P. H. Jones and I have been using ouabain, principally by the intravenous route, (though

we have also used it by the intra-muscular and the oral), since the first part of the past October. We have given it only to cases of aortic regurgitation and the large hearts of syphilis, with failure of the left side of the heart, and have tried to avoid its use when failure of the right heart was in evidence. I feel that this drug has supplied our need, and my conclusion, based purely on clinical grounds, is that it is the drug of choice in such conditions. I feel that it has saved life and restored comfort to many patients, who would not have been helped by the measures in common use. I believe that these results are to be attributed largely to the fact that the coronary vessels of the heart are not constricted and that conduction is not effected. The relief of dyspnoea following the intravenous injection of this drug is almost unbelievable. A detailed report of many cases, and many observations, will be made by Dr. Jones and myself at the next meeting of the Louisiana State Medical Society. Let me conclude this brief summary by saying that we have had no mishaps with ouabain and have not had any deaths that could be even remotely attributed to its use.

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DISCUSSION.

Dr. George R. Herrmann (New Orleans): We cannot but agree with Dr. Jamison's clinical observations that quinidin is a useful drug, but I believe that many of us would add "in certain cases." The pendulum is swinging from one extreme to another in the use of quinidin. The first phase was extreme optimism. We had good results. Then accidents occurred and we changed into the second phase of therapeutic nihilism of the drug. Now we have emerged from that phase with considerable experience, having learned a great deal about quinidin, and are entering the phase of conservative confidence in the value of the drug.

In St. Louis, early in 1919, we had about 18 very good results in about 40 cases of auricular fibrillation that is almost 50%. Then came two accidents, and after these two accidents we were quite "gun-shy." We were unduly overcome, I know, but these accidents served to show that the type of case to be treated, the preliminary treatment as well as the initial dosage of quinidin are all of the utmost importance. In time we were all impressed with the fact that all cases do not respond; some that respond show a return of the abnormal mechanism within a short time.

A careful survey of the cases to be treated is important to avoid the accidents that we had in the early use of the drug. In the selection of the cases, it is the early case of auricular fibrillation which responds most favorably. These cases we usually see appearing suddenly after operation for hyperthyroidism. There is little danger in the use of quinidin in this type of auricular fibrillation, and specular results are the rule.

Often an acute infectious disease precipitates auricular fibrillation. We see these cases revert to normal with small amounts of quinidin, and remain so for considerable periods of time. These cases would respond to digitalis, but it often necessitates remaining on digitalis forever, which cannot in any way compare with the establishment of normal mechanism.

The absence of valvular disease or signs of myocardial damage, are further favorable omens for the ecectiveness of quinidin in arresting an auricular fibrillation that may be the cause of considerable distress.

The more advanced the case is, the more unfavorable the outlook for the arrest of the fibrillation as Dr. Jamison has indicated. It may be worth while to repeat the groups of cases, that might be considered unsuitable for quinidin therapy for auricular fibrillation.

Cases with enlarged hearts presenting signs of heart failure are poor risks for quinidine therapy. It is dangerous to give such a patient quinidin because of the accidents that happen in such a large percentage of such cases. If the patient does not respond to rest, diet and eliminating of fluid, his chance with quinidin are equally poor.

Cases of verrucous or vegetative endocarditis and patients who have suffered embolism are prone to present further embolic phenomena on the re-establishment of normal mechanism with quinidin.

Cases with chronic valvular lesions especially mitral stenosis are unfavorable because of the danger of embolism from broken off feces of thrombus and also because of the presence of mechanical factors which tend to precipitate auricular fibrillation.

Cases that have relief from cardiac pain with the onset of auricular fibrillation should not be tampered with as long as they are free from pain. Idiosyncracy to quinidin by mouth warrants careful consideration of the advisability of the drug even by other routes.

So with the slight modifications those emphasizing the value of the selection of cases, I would agree with the conclusions that Dr. Jamison draws from his series. I cannot think of this study without deploring the fact that instrumental electrocardiographic control was not available in these cases. Some people still rightly insist on being shown with graphic evidence.

Idiosyncracy should be tested out before hand by giving small doses 0.1 gram. Cases sensitive to quinine derivatives should be carefully given very small doses of quinidin. The maximum dosage should not be over 2 grams in 24 hours. Above that toxic states may develop.

Now as to the question of ouabain I think one of the most important things to emphasize is the preparation that Dr. Jamison has selected and used with such spectacular results. Arnaud's preparation of ouabain is undoubtedly better than any other on the market. The Thoms' and Boeringer preparations that we got in ampules some years ago are unstable, inconstant, dangerous and inefficient as compared to Arnaud's. The effectiveness, stability and reliability of the French preparation has been repeatedly demonstrated.

Another point worthy of comment is the type of case that Dr. Jamison selected. Patients with syphilitic regurgitation are the most hopeless of cardiac cases for treatment. Two years ago, R. W. Scott of Cleveland reported a case, emphasizing the point that therapy was practically ineffective in his cases; that the patients died in from 2 weeks to 2 years on an average within 8 months after the onset of symptoms such as those of a failing myocardium. With this unusally poor prognostic outlook for the type of case selected the results of Dr. Jamison are indeed very gratifying.

I would therefore like to emphasize the importance of a "follow up" in these cases, I would like to ask Dr. Jamison and Dr. Jones how long their beneficial effects persisted, and what the average life expectancy was after the onset of symptoms. These patients no doubt are discharged and go back to work. How long before they come back to you? The mere fact that you have been able to get patients out of bed is distinctly encouraging in itself.

The mechanism of the action of ouabain in these patients is interesting. Why is not digitalis effective in these cases? What Dr. Jamison tells is suggestive and interesting. Coronary circulation is already embarrassed with aortic valve lesions and this with the added factor of the effect of the drug on the coronary arteries would seem to be explained. However, I believe this question requires further study. Qualitatively digitalis acts similarly but quantitatively there is a great difference.

Professor J. T. Halsey as early as 1916 emphasized the fact that strophanthus preparations were 100 and even 200 times more toxic than digitalis preparations when given intravenously, yet some have been giving doses of strophanthus by mouth in the same dosage as digitalis, fortunately the strophanthus preparations are not absorbed from the gastrointestinal tract. The evidence as to the absorption of the drug that takes place is an important factor. I just wonder if the intravenous method of administration of a very powerful ouabain in relatively high dosage does not play an important part in the brilliancy of the therapeutic results obtained and whether the intravenous administration of a good digitalis preparation in sufficient and equivalent dosage would not yield at least fairly comparable results.

Dr. Chaille Jamison (closing): Where one is dealing with a very large heart, accompanied by failure, quinidin is not indicated until compensation has been restored by the use of ouabain (in the case of the syphilitic heart), and digitalis (in the case of the rheumatic heart). If auricular fibrillation persists after the restoration of compensation, then quinidin is the drug of choice. I have seen one case of goitre heart with auricular fibrillation that I believed could have been saved could she have retained the quinidin. This was,

however, constantly vomited and seems to illustrate an intolerance to quinine. In such cases quinidin may be administered intravenously. Where angina pectoris accompanies auricular fibrillation, quinidin should be a far more useful drug than digitalis.

I may conclude by saying that at the present time I believe that ouabain by intravenous administration is the drug of choice in aortic regurgitation; that in mitral disease digitalis cannot be surpassed. Where a drug of the digitalis group is indicated by the intravenous route, ouabain should be used, and after the administration of several hundred such injections, I have seen no ill results. I have not been able to determine as yet the duration of the relief from symptoms afforded by ouabain. Finally, let me say that both of these drugs are dangerous, but all potent drugs are so. I believe that they should be used only in selected cases and only by those familiar with their action.

ADDISON'S DISEASE: REPORT OF THREE CASES, INCLUDING ONE IN A NEGRO.*

I. I. LEMANN, M. D.,

NEW ORLEANS.

Recent studies of the frequency of Addison's disease have failed to bear out Addison's prophecy that the disease would prove to be fairly common. Conybeare and Millis[1] in a study of the autopsy records at Guy's Hospital, London, during the period from 1904 to 1923 found but twenty-nine cases proved by autopsy to be Addison's disease. Twenty were in males and nine in females. Rowntree[2] writing in 1924 reported that forty-seven cases had been seen at the Mayo Clinic since January, 1912, representing approximately one in every six thousand six hundred patients or sixteen to one hundred thousand patients registered. I have recently turned to the files of the Charity Hospital here in New Orleans and have found only eight histories of Addison's disease filed since 1910. A study of these histories shows only two positive cases substantiated by autopsies and a third probable case. During the years 1910 to 1924, inclusive, that is to say during the time in which these three cases occurred there were two hundred fifty-five thousand three hundred thirty admissions to the Charity Hospital, thus there was one case to every eighty-five thousand one hundred and ten admissions. In view of the rarity of the condition, it seems worthwhile to put on record the exact description and pathological findings of as many cases as possible. In the last year I have seen three cases. One of them, a negro, was one of the three cases in the Charity Hospital records to which reference has just been made. The diagnosis was established intra vitam. A second case, a white man, was recognized only after death. The third case, an Italian, is still living.

Case 1. E. B., Colored Male, age 51. Admitted to Charity Hospital October 14, 1924, died December 14, 1924. His complaint was of weakness and of change of color. In January 1924 his hands, forearms and face began to turn darker and the discoloration was progressive until it had spread over the entire body. In July he began to feel weak and quit work. He had spent much of the time in bed since then. There was no nausea or vomiting. The bowels were regular, one movement daily. There was an occasional cough with a slight amount of whitish expectoration. There had been considerable loss of weight during the past few months.

Past History: Measles in childhood. Influenza in 1919. Penile sore in 1920. Gonorrhea years ago. Family history was without interest.

Physical Examination: The patient was blacker than any negro ever seen. The skin was of the color of stove polish or shoe black. The hands, face and forearms were especially dark, so also were the feet and lower portion of the legs. There was no eruption and no scars. There was a dark discoloration of the gums and spots on the tongue and buccal mucous membrane. The teeth were in poor condition with many crowns and fillings. The heart sounds were very indistinct but there was no murmur. The blood pressure was 98 systolic, 60 diastolic. The lungs showed no abnormality. The abdomen was flat. The liver and spleen were not felt. The pupils were equal and reacted to light. The patellar reflexes were normal. The urine showed a few fine glanular casts

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and a few pus cells. The sputum was negative for tubercle baccilli. The blood examination was as follows. Red blood cells 3,900,000, leucocytes 7,000, Hemoglobin 55%. Neutrophiles 56, small mononuclears 31, large mononuclears 7, eosinophile 7, basophiles 1. No abnormal cells. Wasserman strongly positive. Examination of the feces revealed no ova. A section of the skin taken from the arm was reported by Dr. Couret, pathologist of the Charity Hospital, as showing marked pigmentation of the chromatophores.

Through the courtesy of Dr. Jamison, in whose service he was, I saw the patient but this was only a few hours before his death. At that time the blood pressure could be read by neither the auscultatory nor the palpatory methods. The heart sounds could not be heard distinctly. The patient had previously had some suprarenal substance by mouth and the opinion was expressed in the record that the color of the skin had become somewhat lighter. He was, however, when I saw him jet black. He had also received several doses of neosalvarsan. The autopsy showed the adrenals consisting each of an irregular lobulated oblong mass about 8 cm. in length and about 2 cm. in diameter and were pale yellow in color and surrounded by a small amount of fat. On section the cut surface was very gritty and showed numerous yellow areas varying in size from a pin head to a pea. Dr. Couret reported some of these yellow areas, especially the large ones, showed central necrosis, caseation and cavity formation. There was also calcification about these areas. Histological study showed tubercules. The lungs showed numerous areas of consolidation varying in size from a pea to a small marble. In the right apex was a cavity about the size of a small marble. In the kidneys there were a few small tubercles. The retroperitoneal lymph glands also showed tubercules. There was a syphilitic aortitis.

Case 2. M. R., White Male, age 54. Admitted to the Touro Infirmary on November 5, 1924. His complaint was of vomiting, coughing and pain in the chest. The record was obtained from several sources, as the patient, when questioned, was not able to give a clear and concise history of his condition. The patient was a painter whose home residence was in New York but he had for some years been traveling about the country. He had been in New Orleans for several months. For the two months before his admission, he had been losing strength and weight and had been in the Charity Hospital for several weeks. From the Charity Hospital he had gone to a very unsanitary lodging house. He said that he had been vomiting everything he had taken for the past two weeks. His bowels had been constipated for an indefinite period. He had been coughing for about a week and expectorating a greenish phlegm. For several days he had had a pain in the left side of the chest. He was the picture of starvation. The breath was foul with a disagreeable odor of vomit. The mouth was dirty and the teeth very bad. The chest was hyperresonant and we were not able to make out anything further because of the hyperresonance. The abdomen was negative. I noted at first the difficulty in obtaining his history and I thought this was due to the fact that he was unintelligent and could not co-operate. In a few hours, however, it became apparent that he was very poorly oriented. He became quite restless and had to be restrained. At this time a proctoclysis of glucose was begun. The countenance was Hippocratic and in general the condition resembled that which is described in the older text books as typical of severe and late typhoid. He was given an intravenous infusion of 500 c.c. of 5% glucose solution together with fifteen units of insulin. About forty-five minutes later, he grew gradually weaker, the eyes rolled up and there was a seeming flaccidity of the left arm while he continued to pull the covers and to rub together the fingers of the right hand. Several attempts to collect blood for chemical analysis were futile. The patient died about five hours after the glucose infusion.

The autopsy of Dr. Lanford showed a general lack of subcutaneous fat. The skin was loose, pliable and elastic and of normal color. The right pleural cavity was almost obliterated by old fibrous adhesions. On the left side there were also a large number of adhesions but not to the extent of those on the right. The lungs showed extensive fibrosis with many miliary tubercles. The heart showed brown atrophy. The aorta had areas of senile sclerosis. There was fatty degeneration of the liver. The spleen was enlarged and light grey in color. No tubercles were found. In the kidneys were small miliary tubercles about three to five mm. in diameter, numbering about ten to each kidney. The stomach and intestines were greatly contracted. The stomach was extremely small, the lumen hardly greater than that of a gut. The intestines were the size of the little finger. The lymph nodes of the mesentery were enlarged. The adrenals were enlarged and firm and when cut across showed the medulla bright buttery yellow and the cortex very red. Histological study showed tubercles.

Case 3. J. G., age 32, Italian. Admitted to the Touro Infirmary November, 1924. He considered himself perfectly well and came merely because of his striking change in color. He had noticed a slight change in color eighteen months previously but had attributed this slight browning to the fact that he was working in the sun every day. About

four months previous to his admission his wife called his attention to the fact that he was turning much darker. The intensification of the color was first noted on his face and hands and spread gradually in a uniform manner to the whole body. He considered that the color was most intense about two months before his admission. At that time he had a febrile attack with temperature to 103°—characterized by prostration. The weakness lasted only ten hours but he was sick for ten days. He returned to work twenty days after this attack and had been working hard ever since. He thought his skin had been growing brighter ever since. He had no cough, no hemoptysis, no sweats. He had lost no weight. Sexual desire and power was unimpaired.

Previous History: Whooping cough at 25, malaria at 16. At 31 he was sick for a week with a cold. Immediately after this he had a severe case of typhoid. Two months after the typhoid he again had a slight fever for two or three days and a swelling of the abdomen. The treatment was a salt-free diet and purgatives and a medicine which caused him to urinate frequently. The abdominal swelling disappeared after a week and he returned to work. He denied all venereal disease. Family history was without interest.

Physical Examination: General appearance: Patient was dark brown, his color being like that of a Malay man or an American Indian. He was, however, of pure Italian stock, born in the old country, being seven years old when he came to this country. The head was dolicocephalic in type. The features were Caucasian. The forehead was broad and wide. The temporal fossae were well marked and sunken, bringing out the zygomatic process very prominently. The superciliary ridges were well marked but delicately chiseled. The nose was long and of the Roman type. The nostrils were delicately formed. The lips were thin, the chin firm and the ears were moderately large, well proportioned. The face as a whole gave the impression of intelligence, thoughtfulness and animation. The hair was jet black, straight and silky. The skin was of normal texture and showed no abnormalities other than the color already described. The scalp was much lighter in color than the remainder of the skin. The color was otherwise absolutely uniform over the whole body. There was a normal growth of hair which was chiefly confined to the sternal, axilliary and pubic regions and long the midline of the abdomen above and below the umbilicus. When the skin was stroked with the fingernail there appeared a pink line slightly elevated like a moderate dermatographia. This could not be interpreted as a Sergent line. The skeleton was small, slender and well proportioned. The hands were of the long and narrow type, the fingers being long, moderately broad and blunt. The thumb reached to the middle joint of the index finger, the little finger to the distal joint of the fourth finger. The muscles were firm and well developed. The cervical lymph glands along the sternocleiclomastoid were enlarged, especially on the right side. The inguinal glands below Poupart's ligament were enlarged, some of them being about the size of a kidney bean. Otherwise there was no adenopathy. The conjunctivae were normal. There was a slate blue discoloration of the buccal mucous membrane opposite the last molars on each side. Tonsils, enlarged. Teeth, bad, several decayed and missing. Lungs, normal. Heart, no visible nor palpable apex beat. The heart dullness extended 8½ cm. to the left from the middle in the 5th interspace and about 2 cm. to the right in the 3rd interspace. Heart sounds were normal. No murmur. No irregularity. Radial artery was small and easily compressible and the walls could not be felt. Rate 72 lying. Blood pressure 96 systolic, 62 diastolic. Abdomen: Rounded, level, no tenderness and no masses. The liver and spleen were not felt. Genitalia: Darker brown color than the rest of the body, otherwise normal. Neurological: Pupils equal, regular, symmetrical and reacted to light. Knee jerks, normal. Plantar reflexes: Normal.

The temperature observed for six days ranged usually from 98° to 98 3/5°. On one occasion it was recorded at 97 2/5°. The pulse rate was always from 80 to 85. An intradermal tuberculin test (O.T.) yielded an absolutely negative result.

The urine showed no chemical abnormality. There were occasional hyaline and finely granular casts. The specific gravity ranged from 1018 to 1022. The phenolsulphonephthalein test of the kidney function was 20% for the first hour, 15% for the second hour, a total of 35%. Anemia has been set down as one of the characteristics of Addison's disease. Our patient had a normal red blood cell count: 5,250,000 but a hemoglobin of only 58% Dare. There were no red cell changes. The leucocyte count was 7,250 and 6,500 respectively on two occasions. The differential count was as follows: (200 cells counted)

November 14, 1924,	S.	38%
	L.	4
	N.	54
	E.	4
November 24, 1924,	S.	29
	L.	3
	N.	59
	E.	8
	B.	1

Because of the eosinophilia several searches for intestinal parasites were made but none were found.

A gastric analysis after an Ewald test breakfast showed no free HCl and a total acidity of 18. There was no lactic acid and no chemical evidence of blood. Microscopical examination showed nothing noteworthy.

I am indebted to Dr. W. E. Garrey for the following observations made on the patient in the physiological laboratory at Tulane University.

The ergometer test of the grip of the right hand was 22½ kilograms, that of the left hand 28 kilograms, to be contrasted with 35 kilograms right hand, 33 kilograms left hand of I. I. L. and 40 kilograms both right and left of a negro porter. Vital capacity was 2500 c.c. The blood pressure as recorded by the Erlanger sphygmomanometer was systolic 82, diastolic 65. The cuff pressure was then set at 82 and the patient directed to close the fist of the free hand five times in ten seconds. This mildest physical effort caused a slight rise in the blood pressure (as indicated by the higher excursions on the curve) during twenty-five seconds.

The following observations were made following the injection of adrenalin:

OBSERVATION I.

Blood pressure

Time	Pulse	Systolic	Diastolic	Remarks
2:40	60	94	60	
2:42				Adrenalin 0.5 c.c. hypodermatically.
2:47	62	94	52	
2:52	68	94	48	Feels shaky and chilly.
2:57	70	98		Feels shaky. Diastolic could not be read.
3:02	78	96		
3:07	72	98		
3:12	74	92		
3:17	72	96		Pulse irregular.
3:22	76	94		
3:27	72	92		Pulse irregular.
3:32	66	90		
3:37	70	92	20	
3:42	64	92		
3:50	66	96		

Patient was quiet throughout the proceedings. When asked about his "Feelings" said that he felt shaky and slightly chilly. This lasted about 20 minutes.

Patient co-operated well throughout the test. Urine collected before and after test, both negative for sugar.

OBSERVATION II.

Blood pressure

Time	Pulse	Systolic	Diastolic	Remarks
3:15	70	80		Pulse weak.
3:20	74	80	40	
3:25				Adrenalin 0.75 c.c. hypodermically.
3:30	60	96	54	Feels shaky and trembly.
3:55	82	94	50	Pulse full, less trembly.
3:40	80	94	48	Feels the effect slightly.
3:45	90	94	48	
3:50	88	90	46	
3:55	88	86	40	
4:00	86	90	40	
4:05	88	84	40	
4:10	80	82	40	
4:15	78	84	40/0	Diastolic flow—heard from 40 down to 0.
4:20	72	82	40/0	
4:25	72	84	40/0	
4:30	76	84	40	

Co-operation good. Urine negative for sugar.

OBSERVATION III.

Time	Pulse	Blood pressure Systolic	Diastolic	Remarks
2:05	70	86	65	
2:15	72	86	54	
2:18				Adrenalin 1/1000 0.5 c.c. hypodermatically.
2:20				Feels shaky.
2:30	76	98	54	
2:35				Shaky feeling gone.
2:45	82	90	44	
3:00	72	86	44	
3:15	80	90	54	
3:30	72	80	44	
3:45	68	84	40	
4:00	66	80	36	
4:15	68	82	50	
4:30	64	80	40	

Attention is called to the absence of glycosuria following these injections. This is said to be characteristic of Addison's disease. Eppinger, Falta and Rudinger[3] have demonstrated a high sugar tolerance and an absence of glycosuria following injections of Adrenalin in patients with Addison's disease. Motzfield[4] (quoted by Riesmann[5]) is said to have found no increased sugar tolerance in one case. We were able to observe in our patient a marked increase sugar tolerance. On two occasions he was given 100 grams of glucose on a fasting stomach and the blood sugar was determined with the following results:

OBSERVATION I.

Fasting	95	mgs.	per	100	c.c.
30 minutes after meal	100	"	"	"	"
1 hour after meal	100	"	"	"	"
2 " " "	100	"	"	"	"
3 " " "	100	"	"	"	"

OBSERVATION II.

Fasting	95	mgs.	per	100	c.c.
30 minutes after meal	95	"	"	"	"
1 hours after meal	95	"	"	"	"
2 " " "	100	"	"	"	"
3 " " "	95	"	"	"	"

On another occasions the blood chemistry on fasting stomach was, as follows:

11-17-24—

Total non protein nitrogen	35.1	mgs.	per	100	c.c.
Urea nitrogen	17.5	"	"	"	"
Creatinine	.967	"	"	"	"
Uric Acid	5.33	"	"	"	"
Dextrose	83	"	"	"	"

The basal metabolic rate was subnormal—minus 17.

It was impossible to persuade our patient to remain in the hospital for he felt perfectly well and even denied any weakness or fatigability in spite of the demonstration with the ergometer and spirometer. Rowntree's reports of two years ago as to the therapeutic results with epinephrin hypodermatically and by rectum and desiccated suprarenal extract by mouth were sufficiently encouraging for us to urge their use here. We have not been able to carry out even the smallest part of Rowntree's program.[2] Recent reports from the patient are to the effect that he still continues active as a strawberry farmer and that he has no complaint of any nature. Fifteen months have elapsed since his admission to the hospital and the recordation of the findings above. Nineteen months have elapsed since the marked pigmentation was remarked. Thirty-two months or nearly three years have elapsed since he noticed a slight change in his color. The average duration of the disease is said to be one to three years.

SUMMARY.

Three cases of Addison's disease are reported. In the first the diagnosis was established at autopsy. In the second, a negro, the diagnosis established ultra vitam was confirmed at autopsy. The third pa-

tient is still living three years after the onset of the mildest indications of the disease. Objective evidence (except for the negative tuberculin test) is too strong to permit a doubt of the diagnosis.

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DISCUSSION.

Dr. R. C. Pigford (New Orleans): These cases present interesting features in that they are examples of three types of progress of Addison's disease. The course of the disease depends upon the type. It may be acute, lasting about two months; or subacute, continuing from six months to a year; or chronic, extending over a period of two or three years. One or two isolated cases have been recorded as existing for a period of three years. One or two isolated cases have been recorded as existing for a period of ten years.

The first case Dr. Lemann presents is one of special mention in as much as it is, so far as I have been able to determine, the first case reported in the negro race. It is also interesting to note in this case that there was determinable increase in pigment in the already dark skin of this man.

The advent of epinephrin into the domain of therapy has aided materially in explaining some of the pathologic physiology of the disease. In fact we are now reasonably certain that two of the triad of symptoms are a result of suprarenin insufficiency. The gastro-intestinal symptoms are referable to a disturbed sympathetic function. The asthenia is a result of hypoadrenalinism of the vascular system. But the third phenomenon, that of pigmentation, is yet the subject of wide speculation. While we believe this also is the result of alteration of suprarenin, either qualitatively or quantitatively, very little proof is as yet forthcoming.

As evidenced by the microscopic findings in the case of the negro, the pigment produced in Addison's disease is not a metastatic process, but an increase of normal pigment. This substance, as demonstrated by Warthin, is true melanin, and is produced in the reticulo-endothelial cells of the corium. Experimentally, epinephrin, when applied to the skin of a frog, causes contraction of the pigment cells. From this evidence we are led to believe that the pigment is a result of quantitative disturbance of epinephrin formation.

Warthin's observation, however, suggests light as a factor in this disturbance. The fact that the exposed parts have a tendency to a more marked pigmentation than the unexposed, must be considered. The administration of adrenalin in these cases does not result in a disappearance of the pigment, as should take place if the disturbance were a quantitative one. That this pigment is the end product of an oxidative process as the result of light rays on an altered pyrocatechin group (predecessor of epinephrin), is the theory adhered to by some. In the final analysis, we will probably conclude that this phenomenon is both qualitative and quantitative.

The third case is worthy of comment. This man, after nearly three years, is able to carry on his activities as a farm laborer. There has apparently been no progression of the disease for the past two years. This is quite a contrast to the usual course of Addison's disease. It suggests a possible arrest of the condition after advancement to a certain stage. Is not such a condition within the bounds of reason?

Dr. J. Birney Gutherie (New Orleans): The case of the negro man Dr. Lemann reported in his paper was shown at the Medical Section Meeting at Charity Hospital. We who were there saw the blackest negro any of us had ever seen. Looking back, I do not recall having seen any cases of Addison's disease in my own service (colored female medical). We should bear this disease in mind in considering the various pigmentations which are common among negroes.

I had an interesting experience at the Mayo Clinic. Dr. Rowntree showed me an apparatus they were using which resembles the hemoglobinometer. He constructed a pigment scale that had been graduated so as to be able by comparison to tell definitely what the shade was. The apparatus looked not unlike a painter's card. He was able to show definite change in the pigment during treatment.

I was interested in the manner by which they gave adrenalin—by rectum. They were not depending on giving it by mouth. Daily enemas make a whole lot of work and are accompanied by a certain amount of abdominal cramps. The treatment must be continued indefinitely. I do not see why patients with Addison's disease could not be taught to use adrenalin hypodermically just as diabetics are taught to use insulin. I think I

could instruct a patient in the giving of adrenalin hypodermatically or intra-muscularly. When we must consider a life time course of treatment the patient must be his own nurse.

Dr. J. N. Roussel (New Orleans): I want to cite the cases I have seen, over quite a number of years. One man came to me completely bronzed—that was 20 years ago. It was diagnosed as Addison's disease; he was bronzed about as much as any man could be. We did not take blood pressure at that time.

The man went out into the country. I saw him within the last two or three months; he is the picture of health today. He has almost gained his normal color.

I have seen two negroes. I am quite sure both had Addison's disease. One died; the other is not dead yet.

Adrenalin was used 25 years ago in Addison's disease.

Dr. I. I. Lemann (closing): As Dr. Roussel has said, the use of adrenalin in Addison's disease is not new. What is new is the administration of adrenalin by hypodermic and per rectum in conjunction with the feeding of dried substances of the whole gland. Rowntree's report showed marked improvement in four or five cases after the long continued use of such treatment.

As you know, we are by no means sure which part of the suprarenal capsule is affected. Both cortex and medulla perhaps are affected. It is not known which is responsible for the production of the asthenia and which is responsible for the production of the pigmentation.

As to the question about the test by mydriasis following instillation of the adrenalin in conjunctiva; I know nothing about it with regard to the efficiency of the suprarenal capsule. I know Loewi's proposal to use it as a test of pancreatic efficiency. I have had no experience with it.

Addison's disease in the negro is of quite considerable interest. In trying to find the original article of Addison in 1855 I came across an interesting volume (both in the Tulane and O. P. M. S. libraries) published in Philadelphia in 1859, giving a review of the papers on this disease by Addison, Brown-Sequard, Jonathan Hutchinson and others, that had appeared between 1855 and 1859. In one of these papers mention is made of experiments done on albino rats. Removal of the suprarenal capsule in other rats produced some changes in pigmentation but the suprarenalectomy produced no change in albino rates. It may be that the rarity of Addison's disease in the negro is not a matter of cursory interest but is related to his natural pigmentation. It may be worth while to study any future cases that may turn up, particularly along the lines of the study of the pigmentation of the skin. Determining the character of this pigmentation may open up an entirely new field of speculation.

SPLENECTOMY.*

ISIDORE COHN, M. D.,

NEW ORLEANS.

Professor Clinical Surgery, Tulane University; Associate Senior Surgeon, Touro Infirmary.

This report is based on personal experience in a small group of cases, an analysis of cases treated at Touro Infirmary during five years, and a brief review of the literature.

The operation of splenectomy is not of recent origin. Records show that in 1549 a surgeon at Naples removed a spleen for splenomegaly associated with quartan fever. Hemorrhage following injury was one of the early recognized indications for splenectomy.

According to Krumbharr, Obrien was the first to perform the operation in America (1816). A careful and interesting history of the operation is to be found in the monograph of Pool and Stillman. It would only be repetition to give more here—this is sufficient for us to realize that we are not invading recently explored territory.

Review of records indicate that there are too few done today, even on cases which offer, at some stage in their progress, an opportunity to be improved by splenectomy.

No operation can be considered to be on a scientific basis unless the functions of the organ to be operated are understood, in part if not entirely.

Can it be said that we do understand the functions of the spleen? No. Some facts are known. It may be said:

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*Read before the Orleans Parish Medical Society, March 8th, 1926.

*From surgical section, Touro Infirmary.

1. The spleen is a member of the reticuloendothelial system.

2. The spleen destroys red cells.

3. Platelets are destroyed by the spleen.

4. Thromboplastic substance which has to do with coagulation is the result of platelet destruction.

5. The spleen acts as a filter.

Many other disputed functions are sometimes given—too numerous to mention.

1. The cases to be reported come under the following groups:

1. Rupture of spleen.

2. Thrombocytolytic purpura.

3. Splenic anemia.

4. Pernicious anemia.

5. Hemolytic jaundice.

RUPTURE OF SPLEEN.

Rupture of the spleen is a definite indication for splenectomy—because of hemorrhage. Statistics show that the mortality when "conservative treatment is applied is about 96% (Choux). Recent operative statistics indicate that it may reach as low as 37%.

It is true that the two cases here reported died. By a curious coincidence both patients were operated the same evening. Our records indicate that there was only one other ruptured spleen admitted to the institution during a five year period. The third case was operated and recovered. (Stone.)

A brief summary of the cases follows:

1. Master W., age 14. Injured by an automobile. Patient was brought into hospital immediately.

Complaint: Patient feels very weak and has pains on taking a deep breath.

Examination: Apparently very uncomfortable. Respiratory movements difficult, rapid, thoracic in type. Abdomen full, particularly in the epigastrium, board-like rigidity. Dullness of percussion. Rectal examination reveals fullness in the posterior cul-de-sac.

Operation: Splenectomy. Surgeon, Isidore Cohn.

Left rectus incision, Bevan type. When the peritoneum was opened a large quantity of blood was found free in the abdominal cavity. The hemorrhage was found, after examination, to be coming from a tear in the splenic vessels; the pedicle was ligated and the spleen removed in the usual way.

Patient died within a few hours as a result of hemorrhage and shock.

Case 2. Master C., age 10. Patient fell from a hay loft, a distance of about 20 feet, walked about 100 yards and then fell in a faint.

He complained of abdominal pains, difficulty in breathing. He seemed to be in great distress as he tossed about the bed.

Examination: Abdomen: Fullness, particularly in the epigastrium, there was a board-like rigidity of the upper abdomen. Rectal examination: Fullness in the posterior cul-de-sac.

Operation: Splenectomy. At operation it was found that there was a tear of the capsule and splenic pulp.

Blood findings prior to operation, Hemoglobin 65. Total reds 4,565,00, total whites 31,000. Patient was transfused the following morning. He seemed to respond very well to this measure. Two days after the accident temperature rose to 102 and within a period of three hours was 106-5. There was evidence of pneumonia. Patient died on the second day.

These cases have many features in common. Both resulted from great trauma; an automobile passed over the chest and abdomen of one, the other fell from a height of from 10 to 20 feet.

Physical examination in both cases were identical: a. marked pallor; b. rapid, thoracic type of respiration—accessory muscles of respiration were brought into play; c. rapid low tension pulse; d. abdominal pain; e. rigidity of abdominal wall, particularly on the left; f. dulness on percussion of abdomen; g. rectal examination shows fulness in the posterior cul-de-sac.

Blood findings: Both cases showed marked leucocytosis (22,700 and 31,250) and practically normal red count (4,565,000 and 4,950,000). Hemoglobin in one case

was 65 and in the other 83. The history and physical examination clearly indicated intra-abdominal hemorrhage — probably rupture of a solid organ.

One might be mislead by the blood picture if it is not known that hemorrhage results in an early leucocytosis, not accompanied by a relative fall in hemoglobin and red blood cells. This has been an established accepted phenomena for many years. (Crile, Cannon, Pool, Goivertz.)

1. It seems logical to conclude that more cases must have been observed.

2. Conservative non-operative treatment must of necessity result in death if there is a large rent in the spleen or one of its vessels.

3. Transfusion cannot be expected to help patients who continue to bleed.

4. Early diagnosis and splenectomy followed by transfusion offer at least some hope in this otherwise fatal condiion.

THROMBOCYTOLYTIC PURPURA.
(PURPURA HEMORRHAGICA.)

This clinical entity offers the most striking example of the value of splenectomy—no operation is followed by more spectacular results in properly selected cases.

Purpura hemorrhagica or thrombocytolytic purpura presents a definite clinical picture—yet the diagnosis is often made when analysis of cases so designated would not warrant the designation.

If splenectomy is resorted to in any but those which definitely correspond to the classic picture it will not be long before the operation will fall into disfavor.

The blood findings in purpura hemorrhagica are fairly constant. There is a marked diminution in the platelet count; the coagulation time is normal, but the bleeding time is prolonged. The clot is non-retractile.

Until very recently the value of platelet counts was not appreciated. Dr. Liles has developed a method for platelet counting which is accurate and rather simple.

Such information as we have of this disease picture is based on laboratory findings. Dr. J. H. Wright developed the idea of the origin of platelet from Megakarocytes. This has received general acceptance. It has been shown that platelets are the only formed element which have to do with coagulation, their destruction results in production of a thrombo-plastic substance. When produced in normal numbers coagulation time of blood is normal. This then indicated that in this disease platelets are formed in normal quantity.

In purpura hemorrhagica the spleen is enlarged. Evidence points to destruction of platelets by the spleen and other members of the reticuloendothelial system. Removal of the spleen is associated with an immediate rise in the platelet count, and cessation of spontaneous hemorrhages. Where one is dealing with spontaneous hemorrhages one must be particular to see that the case is not one of symptomatic purpura such as Case B 3847 or lymphatic leukemia or in cases where insufficient data is collected.

Case B 3847, age 2. Clinical diagnosis, purpura hemorrhagica. Diagnosis was evidently based on the presence of purpuric spots and septic sore throat. Blood findings in the case were recorded as total reds 4,810,000, whites 10,250. Bleeding time two minutes. No record of platelet count having been made.

Analysis of this case suggests that it was evidently purpura simplex—symptomatic secondary to septic sore throat.

In another instance diagnosis of purpura was made when data points to patient having had lymphatic leukemia.

The term essential thrombopenia so often used is I believe incorrect. It is true that there is a thrombocytopenia, but the poverty is due to cytolytic action evidenced by the fact that the number of cells shows such a marked increase within an hour following splenectomy. If the poverty was

due to an essential lack of production the multiplication could not be accomplished so rapidly by reproduction. It must therefore be due to destruction through some agency such as the spleen or parts of the reticuloendothelial system, the removal of which permits an immediate or early restoration to the normal number of platelets in the blood stream.

Our case has previously been reported in detail. Two other cases have been observed but operation has been refused in both, in one case the patient died after repeated transfusions.

Attention should be directed to the fact that reliance should not be placed on sera, thromboplastic substances, and the like for the control of hemorrhage in true purpura hemorrhagic or thrombocytolytic purpura.

SPLENIC ANEMIA.

The diagnosis has been made in 17 cases during the past five years at Touro Infirmary. Five cases have been subjected to splenectomy by four surgeons (Drs. Maes, 2; Gessner, 1; Bradburn, 1; Isidore Cohn, 1), and advised in at least two other cases.

In the light of modern literature on this subject it is difficult to see why more patients have not been given the benefit of the operation.

A brief review of some of the more recent authoritative statements may prove of value.

Sir Berkeley Moynihan in 1921: "The only treatment for splenic anemia is splenectomy."

Bunting: "The removal of the spleen has proved curative in the early stages of Banti's Disease while medical treatment has been without avail."

W. J. Mayo, 1924: "The extraordinary cures that follow splenectomy, even in advanced cases of splenic anemia make splenectomy the method of choice if not the only method of treatment."

Pool and Stillman: "In the early stages of the disease the removal of the spleen results in a symptomatic cure, which may be permanent or may last for several years. In the late stages splenectomy may be followed by marked improvement and prolongation of life."

Hanrahan (1925) reported 35 cases of splenic anemia from Johns Hopkins; of these 22 were splenectomized. His attempt to explain the rationale of splenectomy as an effective measure is interesting and is here quoted:

"1. In any consideration of the general question of anemia one is confronted with the absence of any proved and accepted explanation of the mechanism of the blood balance in the body.

2. We accept that there is a continuous activity of a widely distributed hematopietic tissue which in health is exactly balanced by a hematocatatonistic function.

3. Eppinger and Charmas have shown that 1/34 of the total blood is destroyed and replaced in 24 hours.

4. It is obvious that an uncompensated disturbance in either of these balanced forces will produce the clinical manifestations recognized as anemia or polycythemia.

5. Little is known of the mechanism of blood destruction.

6. The conception of a reticuloendothelial cell apparatus attempts to provide an organ or system for this function.

7. The presence of splenomegaly points to some involvement of the spleen and early led to splenectomy on purely empiric grounds."

One might argue that the etiology of splenic anemia is unknown, that the entire functions of the spleen have not been proven and that the spleen is not the diseased organ in splenic anemia hence splenectomy is not rational.

This group may be answered in the words of Dr. W. J. Mayo: "The spleen does not often act on its own initiative, but rather as an agent of destruction set in action by influences over which it has no control. In removing the spleen, therefore one removes an agent of destruction,

not necessarily the cause of the disturbance; the effect may cure or relieve the patient of manifest symptoms, the essential cause of the disease being rendered ineffective by removal of the agent of destruction."

To illustrate the value of splenectomy even in apparently late cases the following case of my own and one of my colleagues, Dr. Maes, are here cited:

Mr. B. Complaint: Swelling of the abdomen, pain, weakness.

Examination: Emaciation, multiple telangiectases irregularly distributed over body surface, slight jaundice, large liver and spleen.

Blood findings: Total reds 3,050,000; Color index .9; Bleeding time, 2 minutes, 30 seconds; Coagulation time 5 minutes, 10 second. Fragility maximum .45; minimum .25.

Blood chemistry: No abnormality.

Splenectomy was performed September 22, 1924.

On October 10, 1924—Hemoglobin was 85%, total reds 4,160,000, Platelets 214,000.

This patient presented several interesting problems for diagnosis. He was originally referred as a case of purpura hemorrhagica. Normal bleeding time and platelet count within normal range seemed to eliminate the possibility of purpura in this case. Hemolytic jaundice seemed easily eliminated by fragility tests which showed resistance of red cells to be within normal limits. Cirrhosis of the liver, (primary) did not seem to be the probable diagnosis to me, because there was no evidence of a large accumulation of ascites nor was there evidence of circulatory obstruction which would have been expressed by enlarged abdominal veins.

This opinion was doubted by one of my medical associates who believed that the patient did have cirrhosis and that the splenomegaly was secondary.

He improved sufficiently to return to work. Death occurred April 13, 1926, from cerebral hemorrhage.

The most spectacular result recorded is a patient operated by Dr. Maes:

Mr. W., age 21; 1924. Brief summary of the case: Marked weakness, bleeding from bowels and hematemesis.

Examination: Patient very pale. Large abdominal mass in the left side which extended down to left iliac fossa. During the early part of his stay in the hospital blood count was: Total reds 1,825,000; whites 4250. Hemoglobin 10%. After repeated transfusions and splenectomy his count, 2 months after admission, was Reds 3,250,000, whites 7500.

Progress notes state that patient was very much stronger when he left hospital. (These notes are presented through the courtesy of Dr. Maes.)

Contrast the following case:

B 6946, age 54. Male. Fever, weakness, recurring ascites, large liver, large spleen.

Blood findings: Total reds 3,562,000; whites 5500. Color index 87. Bleeding time 1 minute, 40 seconds. Red cell resistance maximum 45, minimum 25.

Urine negative for Bilirubin.

Patient referred for surgical consultation with the diagnosis of "cirrhosis of liver and splenomegaly." The question was the advisability of omentopexy. The examination showed an enlarged spleen, ascites, secondary anemia, leucopenia. "The question of possible splenic anemia should be considered." (Isidore Cohn.)

Five months later the patient was readmitted, worse than before. Blood picture at this time showed a diminution in the white cell count to 2000, red practically the same. Diagnosis at this time was splenic anemia and notes say that patient refused splenectomy.

This case indicates importance of early recognition in order that more benefit may be obtained by operation.

This case like my first case brings up differential diagnosis. All cases do not present all of the possible signs or symptoms which may accompany the hypersplenism which exists in this entity.

If we postulate that splenic anemia is characterized by splenomegaly, progressive secondary anemia, weakness, low color index; followed in the later stages by enlargement of the liver and an associated ascites, we have a basis for differential diagnosis.

Jaundice may be an associated manifestation, though it is uncommon.

Hemolytic jaundice which also is characterized by splenomegaly may be differentiated by the resistance of the red cells. In splenic anemia the red cell resistance is found to be within normal limits. In hemolytic jaundice there is a diminished resistance to salt solution.

The question which seems to be most disturbing is whether the case in point is splenic anemia or cirrhosis of the liver. Pool and Stillman made the following observation: "Some authors believe that the two conditions are identical." It is difficult in some cases to tell which organ, the liver or spleen, was first noticeably enlarged.

If the blood picture suggests splenic anemia the spleen should be removed; other things being equal. Mayo commenting on this question said: "It requires little imagination to see in hepatocirrhosis an attempt of the liver to encapsulate diffuse poisons carried to it through the portal circulation which it has not been able to eliminate or detoxicate. In the removal of the spleen not only a reduction of the portal circulation is effected, but also various noxious agents are prevented from reaching the overburdened liver through the agency of the portal circulation."

It is urged that operation be not done on insufficient data, (such data as seems sufficient to permit the use of the diagnosis); but it also seems unfortunate that more individuals are not given the benefit of what seems at present to be the one hope for comfort and even cure of this condition.

PERNICIOUS ANEMIA.

Splenectomy has been alternately advocated and condemned for pernicious anemia during the past 15 years. Eppinger, Di Costello and Klemperer in 1913 advocated splenectomy.

Eppinger advocated splenectomy because he noted that following the operation there is a diminished hemolysis, evidenced by decrease in urobilin output. Klemperer had noted polycythemia followed splenectomy for supture of the spleen.

Libman (1915) before the Association of American Physicians expressed the opinion that "splenectomy is advisable." Richard Cabot at the same time reported 6 cases on whom splenectomy had been performed with benefit. Percy has reported 37 cases splenectomized. He advocates considering operation as soon as diagnosis is made, except during an acute exacerbation of the disease, especially diarrhea or if there are spinal cord lesions. Hitzrot (1917) reported 7 cases and his conclusion is "I believe with Percy that transfusion, the eradication of foci of infection and splenectomy are valuable adjuncts to our present therapy."

Moynihan says in regard to results of splenectomy for pernicious anemia: "In the majority a degree of improvement results, and a prolongation of life in greater comfort and with increased zest can be recorded." He believes that in 25% of cases the life expectancy is prolonged, 25% more feel better, "and live a few months or perhaps a couple of years longer than the average."

W. J. Mayo (1924): "In the opinion of those perhaps best qualified to judge there is no connection between the spleen and pernicious anemia.

"As I look back over a series of cases of pernicious anemia in which the spleen was removed, several facts stand out:

"1. There has been a remarkable temporary improvement in all, much greater and more prolonged than after transfusion of blood.

"2. Twenty-two per cent of the splenectomized patients have lived beyond the life expectancy of patients not splenectomized.

"3. A few patients have lived a number of years and are able to work. Splenectomy is now rarely performed in the clinic, *too rarely perhaps* due to the influence of the general prejudice against it."

Splenectomy for pernicious anemia at Rochester to September, 1920, 53 cases; 5.6% hospital mortality. Five patients lived 5 years or more. Five lived 3 to 4 years.

Krumbharr collected 153 cases of splenectomy. Mortality 19.6% or better of 11% where the hemoglobin was always above 30% at the time of operation. "The operation is ameliorative not curative."

Krumbharr, (1923): "Splenectomy for pernicious anemia is now, in my opinion, being neglected just as much as it was being overdone six years ago."

Pernicious anemia has been diagnosed in 44 cases which have been treated at Touro during the past five years. Of these two have been operated on. One operated late survived nearly 1½ years, far beyond the apparent life expectancy of the individual. (Isidore Cohn.) One more than two years ago is living and is apparently in good health. (Maes.)

There were 26 males and 18 females. The youngest patient observed was 32. Twelve patients died during hospitalization. Fifteen patients were discharged as unimproved. Of the unimproved and improved cases no follow-up records are available at present by which to determine how long the patients survived after leaving the hospital.

Splenectomy is not a cure. No measure has been found which may be said to be a cure.

Recent experiments by Kahn and Torrey from Cornell University indicate a therapeutic value of B. welchii antitoxin in pernicious anemia.

This suggestion was based, by the workers, on the findings in 33 cases of pernicious anemia—constantly a large number of B. welchii found in stools.

Three monkeys were injected with the toxin made from the culture of B. welchii. Changes occurred in the blood which strongly suggested pernicious anemia. What ultimate effect a clinical test of this method will be remains to be seen.

Summary: In view of the fact that no other method of treatment has proved to be of great value; that experience has proven that the life expectancy is apparently increased by splenectomy; it seems justifiable to resort to splenectomy in pernicious anemia after proper transfusion and the removal of septic focci.

One other disease which is characterized by splenomegaly properly is included in this report, even though splenectomy was not done. The patient after careful study proved to be one of hemolytic jaundice. I was able to see this patient through the courtesy of Dr. Levin. (Details of the case will be discussed by Dr. Levin.)

No condition unless it be purpura hemorrhagica responds more promptly to splenectomy than does hemolytic jaundice. It has been shown, both experimentally and clinically, that the resistance of the red cell is increased after splenectomy. It is known that the fragility of the red cell is the most prominent manifestation, from the laboratory standpoint, of hemolytic jaundice, it follows logically that splenectomy should be the cure—this case will be reported in detail at a later date by Dr. Levin, no further comment will be made.

CONCLUSIONS.

Splenectomy in properly selected cases is an operation which should result in great benefit to the patient. Rupture of the spleen, splenic anemia, hemolytic jaundice, and thrombocytolytic purpura represent the group from which the greatest benefits may be expected.

As long as the etiology of pernicious anemia remains unknown, and no other measure affords greater benefit, one is justified in doing splenectomy for the relief and possible prolongation of the life of his patient.

DISCUSSION.

Dr. I. I. Lemann (New Orleans) opening: The most interesting statistics concerning splenectomy are those of Giffen from the Mayo Clinic and published in 1921. Up to that time there had been 71 splenectomies done for splenic anemia. There had been 9 post-operative deaths; 22 patients had died later and 17 had lived for more than five years. "The fact that 27 out of 28 patients recently heard from," stated Giffen, "are in good condition seems entirely to justify the continuance of splenomegaly in which the process is localized in the spleen or in the spleen and the liver."

In the 32 cases in which splenectomy had been done for hemolytic jaundice, there had been 1 post-operative death, 3 patients had died subsequently, 22 were in good condition and 4 in very good condition. Of all the cases in splenectomy it was considered that hemolytic jaundice was the chief.

Splenectomy has been done in 53 cases of pernicious anemia, in which there were 3 post-operative deaths, 43 had died later, 11 had lived more than 3 years, and 5 more than 5 years. At that time Giffen could find no clear indication for splenectomy in pernicious anemia but felt that in some cases splenectomy would cause improvement and prolong life.

Twenty-six cases of myelogenous leukemia had been splenectomized; among these there had been 1 post-operative death, 15 subsquent deaths, 7 patients lived more than 3 years and 6 were still living. Giffen expressed the opinion that splenectomy was indicated in very chronic cases with very fibrous spleen and leucocyte count never very high. In a great majority of cases, however, he considered it of very questionable value.

Rosenthal writing in the Journal of the A. M. A. 1925 divided cases of splenic anemia into two groups: those with thrombocytopenia and those without thrombocytopenia. The first class showed marked hemorrhagic tendency, the second did not. Splenectomy was much more satisfactory in the first than in the second group. In the second group four patients had post-operative thrombosis and 1 died of a portal thrombosis.

Hanrahan (Archives of Surgery 1925) reported 35 cases of splenic anemia at Johns Hopkins, in 22 of which splenectomy had been done. Of the 22 operated upon 50% were living. Of the 13 not operated upon 38½% were living. Hanrahan considered that cases with marked leukopenia (below 5,000) had a bad prognosis without splenectomy.

From my own experience I would like to remark that in a given case of splenomegaly with enlargement of the liver, it is often difficult to determine in which organ the disease had begun; that is to say whether we are dealing with splenomegaly with secondary liver cirrhosis or with liver cirrhosis and secondary splenomegaly. Recent reports in the literature would lead us to believe that even in cases of cirrhosis of the liver with marked splenomegaly, splenectomy is of value. One case to which Dr. Cohn has referred and upon whom he operated was such a case of cirrhosis of the liver with secondary splenomegaly. This man has survived now two years and is still doing fairly well. I have no doubt that his life has been prolonged.

In this connection I wish to direct attention to a group of cases, reports concerning which are beginning to be more frequent in the literature. These cases have been denominated "liver and spleen complex," thus acknowledging the ignorance concerning the original site of the disease. Last month I saw a child, age 4 years, who had an immense spleen and an equally immense liver. Hemolytic jaundice was promptly ruled out because there was no disturbance of the fragility of the red cells. Similarly leukemia and Banti's were eliminated because both red and white counts were normal. The Wasserman was negative. There was no history of any familiar disease. This child, I believe, belongs to this indefinite liver and spleen complex group. I have advised a splenectomy, which for the present has been refused.

Dr. A. L. Levin: Dr. Cohn mentioned a case of hemolytic jaundice. It might be of interest to say a few words in regard to this case.

The patient was admitted to my service as a case of gall-bladder disease. It was that of a young girl of nineteeen, who gave a history of a large spleen since the age of seven years. She also suffered from a periodic sudden pain in the right hypochondrium, radiating to the shoulder. After the case was studied carefully by Drs. Lemann and Cohn, who were called in consultation, we recognized the characterized symptoms of hemolytic jaundice. The outstanding feature was the increased resistance of the red blood cells to salt solution, marked subicteroid skin and conjunctiva. The spleen occupied the entire left abdomen. She also had a large liver. One point upon which no stress was laid in the history was the leg ulcer above the left malleolus externally. About two years ago Dr. Barker reported a case of hemolytic jaundice, and mentioned in his article that he had looked through the literature, and had not found but a single case of hemolytic jaundice in which a leg ulcer was mentioned. The only one mentioned was by Johnson of Pittsburgh in 1919.

The cause of leg ulcer in hemolytic jaundice is not definitely explained. Some lay stress on phlebitis or varicose veins, which were not observed in our case. Another explanation of the existence of a leg ulcer is the pressure of the large spleen on the iliac vein.

Dr. Barker deplores the fact that this point (leg ulcer) is overlooked and not mentioned in the literature, otherwise it probably would serve as a characteristic sign in hemolytic jaundice. This case that came under our observation had a leg ulcer, which for many years had resisted any form of treatment. She also had a positive Wassermann. Some cases of hemolytic jaundice do give a positive Wassermann, but as Barker says, we cannot lay too much stress on that because we often find a positive Wassermann where there is bilirubin uria. An increasing bilirubin in the blood is characteristic of hemolytic jaundice.

Both Drs. Lemann and Cohn, who deserve credit for their careful study of the case, advised splenectomy, and we regret very much that the patient refused surgical intervention.

Dr. John H. Musser: I do not think there could be very much discussion as to the advisability of operation in those conditions that Dr. Cohn has outlined, except, possibly, the condition of pernicious anemia, as he has said, there has been a great deal of discussion in the past few years as to the advisability of removing the spleen in cases of pernicious anemia.

Experimentally, upon the removal of the spleen there are three very definite marked results: (1) marked increase of leucocytes; an increase which takes place almost immediately and persists for practically the length of the life of the experiment. (2) A change in the blood count takes place which is productive of a severe anemia, which reaches its maximum in a period of two or three weeks, and leaves after a period of forty or fifty days. (3) A increased resistance of the red cells follows splenectomy. I think this observation points to the indications for splenectomy in pernicious anemia. I do not know when or how produced, but undoubtedly, there is an increased resistance of the red cells. As such is the case—if we can bring about an increased resistance of the red cells, we have a definite indication for the treatment of this disease by splenectomy. This is one point that is important.

A point somewhat less important is the question of preparation of these patients at the time of operation. I think the majority of cases in which the outcome is fatal is due to the fact that they are operated on during the time of their disease when they are sickest, instead of waiting for a remission. Of course, I realize there is a very much better chance to get permission for an operation when the patient is very sick. Secondary splenectomy anemia which occurs after removal of the spleen will account for the failure of reaction in those patients that died. If they are prepared by repeated transfusions or operated on after the period of remission, the mortality will decrease.

I feel it is a great pity splenectomy has fallen into disuse in the treatment of pernicious anemia.

Dr. Aldo Castellani: In my experience, splenectomy is extremely useful in anemia and in Banti's disease. Twenty-five years ago, I was a medical student at the University of Florence, and Banti was our Professor of Pathology. I well remember that he was always insisting "there is only one treatment for splenic anemia, and that is the removal of the spleen."

Four years ago, I had an interesting case in London. It was a case of splenomegaly seen by several well known physicians and surgeons. The spleen was enormously enlarged,—the liver beginning to get enlarged too. There was a slight amount of ascites. He was sent to me and I was asked to confirm the diagnosis of Banti's disease and if I would advise removal of the spleen. I concurred with the diagnosis; it was a typical case of Banti's disease in the third stage. The spleen was removed,—it was of enormous size. The improvement was marvelous. The man had given up work and two months after operation was able to attend the office again. A very interesting point is that about a year ago (three years after operation) he developed clear symptoms of leukemia.

As regards kalaazar and malaria, I quite agree with Prof. Matas that sometimes these diseases may show symptoms which somewhat resemble those found in splenic anemia. Kalaazar is a common disease in India and is found in Egypt, and other tropical and subtropical coutries; and infantile kalaazar is quite common in the Mediterranean countries (south of Italy, Sicily, Malta, Greece, and southern France). The patients present many symptoms of splenic anemia. The spleen is enormously enlarged and smooth, very oftentime the liver, too, may become enlarged. There is an important point which differentiates kalaazar from Banti's disease: in kalaazar there is fever, in Banti's disease the fever is usually absent, or if present is generally low. In kalaazar the min. exam. of the spleen juice obtained by splenectomy.

As regards malaria: malaria like syphilis deserves the term "the great simulator?". I have been, for many years, in countries where malaria is common. There are certain cases of pseudo

splenic anemia of malaria origin. I am a great believer in surgical treatments, but as regards splenomegaly of kalaazar and malaria origin, I think operative measures are not necessary. Before a definite treatment for kalaazar was found, the spleen was removed in several cases. I never saw any improvment from that operation. I have seen also cases of splenomegaly of malarial origin in which the spleen was removed, but the general condition of the patient did not improve. Tartar emetic is very effective in kalaazar; it is wonderful to see the wonderful improvement after twelve or fifteen injections of tartar emetac.

In malarial splenomegalia, quinine and arsenic may not make the enlargement of the spleen disappear completely, but, at any rate, the treatment produces immense improvement. There is a point to which I should like to call attention: in certain cases of malarial splenomegalia quinine and in which arsenic alone are not sufficient to reduce the spleen, the local application of X-rays has proven to be effective.

Dr. F. M. Johns: I think we will all agree with Dr. Cohn that splenectomy is the method of choice in hemolytic jaundice at least. The classical blood picture of this condition has often been described as a lessened resistance to hemolysis—or in other words an increased fragility of the erythrocytis to hemolysis by hypotonic salt solutions.

With regard to the practical application and interpretation of the fragility test I must confess that for some time I labored under the impression that all of the cells should be hemolyzed by hypotomic salt solution that would not affect normal cells—and while many marked cases can be found in whom this degree of hemolysis may be demonstrated there are also other cases with a very active production of young cells which are markedly more resistant to hemolysis than even normal erythrocytes. These patients then present a "beginning" hemolysis at a higher point than normal and "complete" hemolysis at a point lower than normal.

Thus for practical diagnostic purposes it would seem to me that from the standpoint of the blood picture that the presence of an actively productive bone marrow as shown by marked polychromatolphilia and a "beginning" hemolysis in salt solutions of 0.44% or higher that the presence of a hemolytic jaundice may be suggested.

It may be of interest to note that in one case that I have kept under observation for a number of years in which there was an unexplained severe secondary anemia with marked polychromatophilia, low complete and high beginning hemolysis—with bronzing of the skin and with no splenic enlargement our diagnosis of chronic hemolytic jaundice was confirmed at both the Mayo Clinic and the Johns Hopkins Hospital. This patient reacts very well to transfusions of whole blood—and has refused splenectomy as long as the transfusions are efficacious.

Dr. F. W. Parham: I shall not go into discussion of this subject fully, but there are one or two points I would like to mention.

With reference to what Dr. Castellani has said: I had a rather interesting experience in a case which proved out to be malarial splenomegalia. I treated this case for some time. We had not examined the blood for plasmodia. The case began to go down. She had a very large spleen. She continued to get worse to such an extent that I concluded to transfuse her. Her husband was the donor. Soon after the transfusion she developed fever which she did not have previously. We examined the blood for plasmodia. It was a question of finding where the plasmodia came from. We examined the husband and found plasmodia.

I put her on quinine; the spleen went down. The case was an interesting observation.

In some cases, the spleen is difficult to remove. Occasionally we will find a spleen that cannot be safely removed on account of the hemorrhage which occurs in tearing away adhesions before the spleen can be brought out.

I had a case sometime ago in which Dr. Jamison was interested. In 1910 Dr. Mayo made some experiments on animals in which it was determined that the splenic artery could be tied, resulting in shrinking and atrophy of the spleen without necrosis. Dr. Jamison took up this work sometime later. He was present at the operation when I attempted to remove the spleen. He said, "Why not tie the splenic artery?" I said that I had had no experience on animals or human beings, and would not take such a chance. I went into the study of the subject to a greater extent and I found experiments performed by others seemed to indicate that you could tie the splenic artery, provided you wrapped the omentum well around the spleen. In this way, we might accomplish the destruction of the spleen, although we could not remove it.

These cases of the first category where the spleen is removed for traumatitis and hemorrhage. There are two points of interest: (1) We have difficulty, sometime, in determining there is hemorrhage going on. Dr. Cohn mentioned the point, but not especially for these patients. We can, by

taking the leucocyte count early in the course of the hemorrhage, determine if there is hemorrhage going on. This was determined by Dr. Crile in his experiments on some 65 transfusion donors. He found regularly in these donors that the leucocyte count was high, while the red cells showed no particular change. (2) In those cases where there is hemorrhage going on the method of transfusion is of some consequence. It is generally agreed today that the use of whole blood is probably better for various reasons than the use of citrated blood. But, in this particular instance, I believe it is an advantage to use citrated blood. Sodium citrate is a distinct hemostatis. I believe in these cases where we wish to get the hemostatic benefit of transfusion, as in hemorrhage, we ought to use the citrated blood.

I had a case recently at Touro. The man lost large amounts of blood by repeated vomiting of blood. His condition was such we could scarcely examine him. He was sent in by a colleague who thought he needed immediate operation. I looked at him and I thought "No, sir, I don't operate on you." On examination of the blood, red cells were reduced down to three million and hemoglobin down to forty. We gave a transfusion immediately of citrated blood from a brother. The transfusion resulted in the complete stopping of the hemorrhage. We were at a loss to know where the hemorrhage came from. When the man had improved to such an extent that I could make an examination by the X-ray, we found a gastric ulcer on the lesser curvature of the stomach. I mention that to show that in these cases citrated blood has a decided advantage. I believe that in most cases it is better to use whole blood, but this is one exception.

I shall not discuss the subject further. I enjoyed the paper very much.

Dr. Ernest Lewis: Removed a spleen in 1910, Charity Hospital. It was very large and partly in lower abdomen. Patient recovered and later became pregnant and was confined in Charity Hospital.

My first case was prior to that year. It was eggplant-shape resting on pelvic brim and diagnosed an ovarian fibroma. Her recovery was uneventful.

My third case was operated upon April 4, 1910, at Hotel Dieu. She was from Shreveport. The spleen was large and floating. She was discharged April 29th, 1910, and was living fourteen years later.

Dr. Isidore Cohn (closing): I appreciate very much the liberal discussion. It is impossible to answer some of the statements, reference to the complete paper will be ample—as much material had to be omitted in the reading.

Dr. Lemann quoted from Giffen (1921) in regard to pernicious anemia. Dr. Mayo (1924) stated that 23% of the splenectomized patients had lived beyond the expectation of patients not operated.

Sir Berkeley Moynihan stated in 25% of the cases life was prolonged and 25% lived longer than the average.

My illustrious teacher said the younger generation was trying to steal his thunder. We are only paying tribute to his teachings and showing our appreciation of him whenever we do anything.

PELLAGRA—HYDROCHLORIC ACID IN THE STOMACH CONTENTS.*

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NEW ORLEANS.

The earliest statement in the literature that we can find relative to the occurrence of HCL in the stomach secretions in pellagra, is that of Angostoni in 1893 (1) quoted by H. F. Harris (9) "The study of the chemistry of the stomach of pellagrins shows a notable degree of *hypopepsia* and *hypochlorhydia*, with catarrh of the mucosa of the stomach and weakness of its *motor-power* and its *innervation*. While in some instances the *total acidity was normal*, the average was distinctly *less than half of this amount*. Likewise *hydrochloric acid* varied from none at all to an amount, in some instances *above the normal*" Harris himself says, in discussion, "There is a general agreement among the writers that there is as a rule, absence or great diminution in hydrochloric acid." Nesbit,(11) at the National Conference for Pellagra, 1909, reported analyses of the stomach contents of ten cases. Four of the ten showed a

*Read before the Orleans Parish Medical Society, December 14, 1925.

diminution of HCL. This collection of Nesbit's seems to be the first on record of a quantitative gastric analysis in this disease.

PELLAGRA 1908.

Marie (3) translated by Lavinder, C. H. and Babcock, J. W., says, "The gastric juice is often less acid in pellagrins. The hydrochloric acid is diminished." He attributes the burning sensation in stomach noted by him with some frequency, to some other cause than the presence of acid.

"Cecconi" quoted by Myers and Fine (7) "found free hydrochloric acid absent in all of his twelve cases, while Niles (5) in an examination of sixty-four cases of undoubted pellagra, found free hydrochloric acid absent in eighteen; deficient in thirty-one; excessive in twelve, and normal in three. He noted that the gastric secretions were diminished or absent in most cases of long standing, while in the few instances where those juices were increased the cases were acute." Table 1, gives a resumé of thirty-five of the series of ninety-three cases treated in the author's service of Charity Hospital during the last five years, January 1921 to December 1925, inclusive. All of the patients were colored females. The average age is 32.8 years. The average duration of treatment in the hospital was 47.7 days.

Complications were not frequent. The table shows that eight cases were complicated with six diseases other than syphilis. Syphilis appears in eight patients and the Wassermann reaction is positive in nine, a percentage of 25.7. This percentage is approximately that of the service at large. We see nothing here to substantiate the statement that a positive Wassermann reaction occurs in pellagra.

Infection with *B. Fusiformis* was noted three times. It is probable that if a more consistent search had been made, the mouth and vaginal secretions would have shown a higher incidence of this infection.

Examination of the feces was made in twenty-eight of these cases and showed the presence of *Amebae Histolytica* only once; and *Necator Americanus* once. Flagellates were not found. These examinations were made primarily to determine the incidence of the amebae and the very low incidence is interesting in view of the statements of several authors as to their frequency in this disease. Whenever the local condition would permit of a proctoscope being used, this was done, and the report is based on proctoscopic findings. In presence of severe anal ulceration, the report as to the amebiasis is based on examination of feces voided into a warm bed pan.

One of our cases, No. 15, shows improvement in secretion of HCL while general conditions progressed favorably. Givens (8) mentions several cases where the course of the HCL secretion showed a progressive diminution in HCL content. These were cases which were doing badly and finally died.

Niles speaks of a "progressive dimunition". This undoubtedly occurs where the case is progressing unfavorably and when it is observed can be considered as a mark of such progression. On the other hand an improving level of HCL or an increase toward the normal, can probably be interpreted as an indication of a more favorable course, other things being equal. All the records of a change in the quantity of HCL observed in the course of the disease, seemed to bear out this idea.

Givens(8) quotes Marie(3), Cecconi(10) and other available records in tabulated form, their findings, with his own and those of a group of cases in collaboration with others. Givens concludes that no definite relation can be found between the absence of pepsin and free hydrochloric acid, and sex, age, duration of pellagra and clinical symptoms." Although the tendency is for acid to disappear hand in hand, such

TABLE 1.

No.	Name	Age	Color and Sex	Admitted	Discharged	Free HCL	Total Acid	Diarrhea	Constipation	Cond. on discharge	Wass.	Syphilis	Intest. Ameba	Necator Am.	Duration of Symptoms before admission	Complications	Remarks	
1	F. M.	20	All patients negro women	5/21/21	9/5/21	5	45	D		Imp.	+	+	—					1
2	E. B.	23		2/21/21	10/17/21	0	18	D		Imp.	+	+	—		3 yrs.			2
3	L. S.	14		7/21/21	9/16/21	0	55		C	Imp.	+	+	—		1 wk.			3
4	L. C.	19		7/25/21	9/20/21	2	55	D		Imp.	—	—	—	—				4
5	L. H.	32		7/14/22	9/14/22	0	25	Neg	Neg	Imp.	—		—	—				5
6	B. P.	35		8/14/21	10/4/21	18	45	D		Died	+	+	—	—				6
7	C. S.	32		7/19/23	11/15/23	21	50	D		Died	—		...					7
8	E. S.	39		12/6/23	2/15/24	0	20	D		Imp.	—		—		4 mos.			8
9	P. M.	25		4/9/24	6/8/24	10	20	D		Imp.	+	+	—	—	2 mos.	Hemorrhoids	Salvarsan 5 yrs. ago.	9
10	E. O.	34		4/15/24	6/11/24	0	5	D		Died	—	—	—				Marked leucocytosis.	10
11	C. M.	24		6/11/24	6/25/25	0	15	D		Died	—	—	—		4 mos.		Bloody stools.	11
12	G. G.	47		11/31/23	11/14/24	0	10	D		Died	—	—	...		6 wks.			12
13	M. D.	40		2/1/24	3/23/24	0	20	D		Died	—	—	—	+	4-5 mos.	Chr. Myocarditis	Ova Ascarides in feces.	13
14	L. S.	31		3/21/24	3/29/24	0	4	D		Imp.	—		—		4 mos.	Hemorrhoids		14
*15	M. J.	51		6/11/24	8/24/24	0	20	D		Imp.	—	—	—		4 mos.	Vincent's Angina		15
16	M. P.	26		7/5/24	7/16/24	0	25	D		Imp.	—		—		4 mos.		Typical skin Lesions.	16
17	E. D.	26		5/24/24	7/10/24	0		D		Imp.	...		—					17
18	C. M.	32		8/20/24	9/2/24	10	50	D		Imp.	—		...			Recto-Vag. Fist Vincent's Angina	Typical skin Lesion.	18
19	F. L.	19		8/24/24	9/18/24	10	30	D		Imp.	—		—				Typical skin Lesions.	19
20	M. M.	55		6/13/24	10/7/24	12	40	D		Imp.	—		—		1 yr.			20
21	M. W.	48		8/23/24	10/20/24	5	35	D		Imp.	+	+	...			Vincent's Angina	Typical skin Lesions	21
22	J. C.	40		10/13/24	12/21/24	18	32	D		Imp.	—		+		3 mos.	Chr. Salpingitis Fibroid Uterus		22
23	L. C.	28		12/6/24	12/13/24	0	13	D		Imp.	—		—		3 mos.		Began with Diarrhea after Salvarsan.	23
24	C. S.	40		2/28/25	4/8/25	5	9	D		Died	—		—		6 mos.		Recurrence after 2 yrs.	24
25	B. B.	24		6/30/25	7/24/25	10	50	Neg	Neg	Died	+	+	—		5 mos.			25
26	C. A.	28		7/13/25	7/25/25	0	23	D		Imp.	...		—	+				26
27	G. B.	21		9/9/25	10/1/25	0	5	D		Imp.	—		—				Paresthesia Arms, Legs.	27
28	M. B.	?		8/3/25	10/22/25	0	0	D		Died			—					28
29	L. C.	30		9/22/25	10/20/25	0	20		C	Imp.	+	+	—					29
30	R. L.	28		10/16/25	11/2/25	0	5	D		Imp.	—		—					30
31	E. T.	50		10/16/25	In hospital	0	2	D		.....	—		—					31
32	A. M.	40		8/15/25	11/4/25	30	65	D		Imp.	—		—					32
33	I. J.	49		12/6/25	In hospital	0	11	D		.....	+	+	—					33
34	E. H.	35		11/19/25	In hospital	0	17	D		.....	—		—					34
35	V. W.	21		11/10/25	In hospital	0	5	D		.....	—		—					35

Average age: 32.8 yrs.

Average length of admission, 47 days

Average free HCL. 4.4

Average total Ac 23.5

Average	
Diarrhea	31
Constipation	2
Regular	2

No.	
Died	10
Improved	21
Remaining	4

Wass. React. Pos. in cases of 34 (26.4%)
Other Clin. evidence of Syphilis in 8 cases
Intest. Parasites Ent. Ameba Hyst 1; Necator Am., 2.

*At time of discharge HCL 10. Total Ac. 20.

is not always the case. It is believed that pepsin and hydrochloric acid are present more often than is expected."

In all, he tabulated 246 cases and arranged them to compare the relative occurrence of normal or excess HCL, diminution HCL or absence of HCL. The author has utilized this tabulation and has added the findings in his own thirty-five cases thereto.

ing the race of the patients. The authors cases reported in this series are all negroes and all females. We have no explanation to offer of the very great difference noted in respect to the occurrence of normal or excessive acidity between our own series and that of the author's above mentioned.

We have tabulated for comparison (Table 3) the cases in this series which were improved or stationary on discharge and

TABLE 2.

		FREE HYDROCHLORIC ACID					
	No. of cases	Excessive or normal—above 18		—Deficient— 18 or below		—Absent—	
		No. of cases	Percent	No. of cases	Percent	No. of cases	Percent
Nesbit	10	2	20	4	40	4	40
Cecconi	10	....	....	....	....	10	100
Johnson	20	6	30	....	....	14	70
Myers and Fine	14	5	35	1	7	8	57
Niles	68	15	23	31	48	18	28
Hunter, Givens & Lewis	24	10	41	2	8	12	50
Guthrie	35	2	5.8	11	31.4	22	62.8
Givens	100	53	53	8	8	39	39
Total Cases	281	93	....	57	....	127	....
Percent Average	....	....	33.0	....	20.3	....	48.7

Table 2 represents a compilation of all the cases of record as regards content of HCL. Givens is not entirely clear in differentiating some of the categories of HCL variation. He assumed *18* as being the line of limitation between deficiency and normal. I have therefore taken this figure, and all above this are classified as *Normal* or *Excessive*, all below this as *Deficient* and where the HCL is utterly lacking the caption *Absent* is used.

It will be noted that the figures representing the author's cases more nearly correspond with Johnson's(4) series. The greatest departure from the analyses is seen in the number and percentages of normal HCL findings, from those of the series of Hunter, Givens and Lewis and that of Givens. The author finds only 5.8% normal or excessive, while Hunter, Givens and Lewis find 41% normal or excessive; and Givens in his 100 cases finds 53%. There is nothing indicat-

those which died, as to the occurrence, *excessive* or *normal; diminished* or *absent* HCL. It is noted that there is a larger percentage of normal or excessive among those that died than among those that were discharged, improved or stationary. There was only one case in each category and probably in a larger series, the figures would be changed. The figures in the other columns *deficient HCL* or *absent HCL* respectively) were practically identical in the fatal cases and in those otherwise discharged. Judging from these records we are not justified in attributing any prognostic value whatever to the presence or absence of HCL in the stomach of a pellagrin. In this conclusion, we are at variance with Johnson(4).

Comparison of findings in 10 fatal cases with 25 non-fatal cases. (Author's series.)

The author regrets that he has no determinations of the rennin and pepsin in the cases studied. Those who have made these

TABLE 3.

Comparison of findings in 10 fatal cases with 25 non-fatal cases. Author's series.

		FREE HYDROCHLORIC ACID					
	No. of cases	Excessive or normal—above 18		—Deficient— 18 or below		——Absent——	
		No. of cases	Percent	No. of cases	Percent	No. of cases	Percent
Improved or Stationary	25	1	4	8	32	16	64
Died	10	1	10	3	30	6	60
Total cases	35	2	....	11	....	22	....
Percent	....	....	5.8	....	31.4	....	62.8

studies however conclude that the values for these vary with the HCl, as a rule. Meyers and Fine(7) made the following statement of the association of pepsin and HCL in the gastric contents. "Acidity is a condition common in pellagra, found in eight of our fourteen cases. It is generally associated with an entire absence of pepsin or with pepsin in only very minute amounts."

Diarrhea, in any disease of mal-nutrition, must be considered as a possible contributory causative factor. The picture of marasmus that gastro-enteritis in childhood produces cannot be forgotten. A dietetic regimen, no matter how beautifully adapted it be, from the standpoint of energy, protein, and contained vitamins, becomes utterly deficient in the presence of diarrhea. So frequent is the occurrence of an abnormally low, or absent hydrochlodic acid factor in the stomach contents of the patient suffering with diarrhea that we all make it a rule, as you know, to examine all chronic or persistant diarrhea cases for HCL after the test-meal. We are in the habit of regarding the presence of hydrochloric acid in the stomach as furnishing a check on the too rapid emptying of the organ. Under conditions of a chlorhydria the chyme finds its way too rapidly into the duodenum and initiates a peristalsis which makes for a failure of absorption due to the rapidity with which the food passes through the small bowel. We are accustomed also to consider hydrochloric acid as the antiseptic of the stomach which inhibits putrefactive changes in the food.

For these reasons it is usual in patients who show a deficiency or an absence of hydrochloric acid in their stomachs, to supply it in a quantity to bring, if possible, the acid to its normal and physiologic amount.

We have examined the records of ninety-three cases of pellagra admitted to our own service, Medical Service No. 4 of Charity Hospital, New Orleans, since January 1st, 1921. We find that seventy-one of these cases, 76.3%, had diarrhea either previous to admission or during the hospital period of admission; seven were constipated, 7.5%; and nine 9.7%, showed neither constipation or diarrhea.

TABLE 4.

Occurrence of Diarrhea in 93 cases of Pellagra treated January, 1921, to December, 1925, inclusive.

	No. Cases	Diarrhea	Constipated	Regular	No. Record
	93	71	7	9	4
Percent	....	76.3	7.5	9.7	4.3

Occurrence of diarrhea in 93 cases of Pellagra treated January 1921 to December 1925 inclusive.

In fourteen of Johnson's(4) cases lacking HCL, diarrhea was present. (In none of his patients with HCL was there diarrhea except one, due to transient cause.) Johnson says, "Without a question, the absence of HCL is an important feature of the disease—not essential to its development, not determining its course, but significant

of its gravity and prognostic of its result."

Our own experience does not conform to Johnson's observation that no patient who had HCL has died nor become insane. I also can point out a number which, in the presence of HCL, had diarrhea as a prominent and persistent symptom. (Table 1).

Johnson's observation based on eight cases that in the presence of rennin even in association with an absence of hydrochloric acid, that the diarrhea was less severe and less persistent, requires further work to confirm or disprove.

CONCLUSIONS.

In this series of thirty-five colored female patients examined I have apparently encountered a larger percentage of cases with entire absence of hydrochloric acid in the gastric contents than has occurred in the tabulations published heretofore.

I am inclined to consider the lack of hydrochloric acid as of some diagnostic value in this disease, and on the other hand let me say, that in a doubtful case presenting a normal hydrochloric acid content, I should consider its presence somewhat against the diagnosis of pellagra.

From a standpoint of therapy there can be no doubt as to the advisability of supplying hydrochloric acid, if the condition of the mouth, throat and esophagus will allow us to do so without pain to the patient. If the full physiologic quantity cannot be given to the patient, it would seem to be logical to give it in some quantity with the food or shortly thereafter. Neither the presence or excess of hydrochloric acid, nor its deficiency or entire absence from the gastric secretion of a pellagrin seems to be of the slightest prognostic value in a case in which the diagnosis is established.

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2. Filippi, Lombroso e Roncoroni. Gazetta degli Ospedali e delli Cliniche 1911, XXXII, 643. Quoted by Harris. (9).
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DISCUSSION.

Dr. D. N. Silverman (opening): The paper of Dr. Guthrie presents certain interesting features. The study of the reactions in the stomach and intestinal tract in different diseases sometimes presents very valuable data. In this respect, however, the cases of pellagra in which I have studied the stomach contents have shown no definite findings. The quantity of hydrochloric acid may range from an absence to a hyperchloridia. I have observed cases for seven months to two years before death and, while large doses of hydrochloric acid were administered regularly during such periods, no beneficial results were obtained.

The stools in pellagra show no interference with the pancreatic digestion as one finds so exemplified in tropical sprue.

Dr. S. K. Simon: The statistical type of work presented by Dr. Guthrie is in the right direction, and I think he is to be commended for giving us opportunity to review these cases so fully.

There is a distinct difference between a true achylia gastrica and an achlorhydria. The aspirated stomach content may not show a reaction, for example, for free hydrochloric acid, and still the acid may be present in loosely combined form. This does not constitute a real achylia, which includes a total absence of hydrochloric acid during all phases of digestion. In achylia gastrica proper the total acidity is not above fifteen, and is usually less, whereas in achlorhydria the total acidity usually ranges above 20 to 25. I do not want to appear to quibble over mere gastric acidity figures, because, as a rule, I am not inclined to lay very much diagnostic value, per se, upon the percentage of hydrochloric acid present in the gastric contents. In pellagra, you will often observe lowered gastric acidity and perhaps achlorhydria, but in my experience, rarely a true achylia gastrica. A similar status may be ascribed to tropical sprue. Pernicious anemia is in another class, however, as regards its relationship to gastric secretion. These three great clinical entities are very closely allied in many of their clinical aspects. If there is one thing we may be certain about in clinical medicine, it is, that in pernicious anemia there is

always a constant and consistent achylia gastricia present, which is not true in the case of either pellagra or sprue.

Dr. J. H. Musser: The discussion is taking a rather interesting turn. Dr. Jamison brought up the question of the blood, which brought to my mind the case of yours I saw a few weeks ago. The patient came to autopsy with diagnosis of pellagra. I wondered if you remembered that specific case and included it in this paper.

I agree with Dr. Simon that achylia is a necessary diagnostic sign in pernicious anemia. Sprue and pernicious anemia are not the same. In one you have achylia and in the other you do not have it by any means.

Dr. A. L. Levin: Dr. Guthrie's findings of gastric analysis in cases of pellagra are very interesting. I recollect three cases of pellagra in my service at Touro in which there was a total absence of free HCL. The absence of free HCL in cases of pellagra is not as constant as in cases of pernicious anema. In pernicious anemia we always find an absence of free HCL. If we find acid in the stomach it is questionable whether the case is one of pernicious anemia. In pellagra it is not so constant. It probably depends at what state of pellagrous infection we see the case. In the early cases there might be a subacidity. Later on as the infection progresses the free HCL disappears. In other words, it is a progressive disappearance of free HCL. The real causative factor of achylia-gastrica is not well understood yet. We see it quite often in other infectious diseases such as chronic infectious arthritis, in syphilis and other diseases. Sajous gives the following explanation, which is probably plausible: At first the infection causes a disturbance in the production of adrenin in the adrenals. The capillaries in the areas of the peptic glands are congested. As the congestion goes on due to the presence of the infection, there is a gradual formation of connective tissue pressing out the essential elements of the peptic glands, and finally the glands lose their function as a result of the excessive connective tissue formation.

In the treatment of pellagra the administration of free HCL is of very little value. The skin lesions disappear promptly upon the administration of lemon juice, say 5 or 6 per day, full diet and tonics.

Dr. J. B. Guthrie (closing): Dr. Simon will find in the table of these cases (Table 1), the total acidity in the column adjoining that of hydrochloric acid values. He is absolutely correct in saying that an examination of the gastrict contents is incomplete without this, especially is this true as I have already said in a disease in which one of the most prominent features is diarrhea.

Dr. Musser refers to a case which was admitted while I was away at the meeting of the Southern Medical Association, to my service in the month of November, 1925. The autopsy Dr. Couret held in conjunction with Dr. Musser before the Senior class. The Doctor is mistaken in reporting that a clinical diagnosis of pellagra was ever made. The blood picture, he did not report. The color index was low and there was nothing else in the blood picture obtained in the ward to suggest a diagnosis of pernicious anemia. I believe Dr. Musser will agree with me that macroscopic changes in the bone marrow, postmortum do not of themselves constitute a sufficient basis for a diagnosis of pernicious anemia.

None of my staff at any time considered this case as one of pellagra and it is not therefore included in the series which formed the basis of this report.

Replying to Dr. Jamison, I can say that I have the complete blood counts of fifteen of these thirty-five cases, I have not embodied them in this paper. There is to be noted in the series, a secondary anemia of more or less severity associated, nearly always, with a low color index. I am collecting the blood pictures that have been made on the rest of my ninety-three cases and shall probably report on these blood findings at some future time.

HEADACHES.*

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For purposes of discussion headaches are grouped under the names of the various specialists whose responsibility it is to treat them; namely, the Rhinologist, the Internist, the Endocrinologist, the Ophthalmologist, the Syphilologist, the Dentist, and the Neurologist.

The rhinologist comes in for a large share of patients whose chief complaint is headache. Many cases come to him with this symptom, the underlying cause of

*Read before North Miss. Six Counties Medical Society, March 17, 1926, Water Valley, Miss.

which is some nasal pathology which can be corrected and the headache cured. Many other cases are referred to him because of their similarity to headaches of nasal origin yet have no apparent nasal pathology present. In this latter class come those cases of neuroses, migraine and other conditions which will be discussed later in this paper.

How are we to separate the cases of nasal origin from the other great group of headaches? The writer believes they should be separated strictly on the basis of apparent nasal pathology. We are led to say this because in recent years there is a tendency to assign all obscure headaches to some sinus condition. This is due to the fact that patients of neurasthenic type are so susceptible to mental suggestion, and any nasal treatment is more or less spectacular and impressive to the patient. If rhinologists accept the responsibilty of treating all cases coming in this category we will all come to grief.

Headaches of nasal origin are due to pressure upon the nerves leading to the nasal structures. The nerves involved are the first and second divisions of the fifth cranial nerves. The anterior chamber of the nose, the anterior ethmoid and the frontal sinuses are supplied by the anterior ethmoid nerve, which is a branch of the first division of the fifth. The posterior ethmoid, the sphenoid, and antra are supplied by branches from the nasal or Meckel's ganglion, which gets its sensory supply from the second division of the fifth. This ganglion receives the vidian nerve which is made up of the great superficial petrosal and the deep petrosal nerves. The deep petrosal nerve is the communicating branch to the carotid plexus. This plexus is a part of the cervical sympathetic chain through which connection is made with the regions over the back of the head, neck, shoulders and lumbar regions. The so-called Sluder syndrome by which the pain over the last named regions are accounted for by connection through the sympathetic chain with Meckel's ganglion is based on the fact of this nervous connection. The difficulty in this explanation comes from the assumption that sympathetic nerve fibers carry sensory impulses. The neurologists have not as yet accepted this assumption. In fact they deny that sympathetic nerve fibers do carry sensory impulses.

The pressure upon sensory nerves supplying the nasal structures causing the pain is due to inflammatory processes, acute and chronic, and to impingement of parts. This impingement may be the result of anatomical abnormalities or it may be induced by new growths.

Acute inflammation causes pressure of the nerve endings by the swelling of the tissues surrounding them. Also pressure is produced inside the sinuses when their openings are occluded by swollen tissue and more material accumulates in the sinuses than they will contain. Pressure for which chronic inflammation is responsible results from constant swelling of the tissues surrounding the nerve endings. Chronic purulent infection in a sinus results in the accumulation of pus the presence of which acts as an irritant and produces hyperemia. Following an acute infection even though the purulent discharge stops there often is so much degeneration of the lining membranes of the sinuses that it remains permanently in a granular or polypoid condition and may give rise to the symptoms that any swollen condition of the tissues might produce, including headaches.

Pressure pains produced by anatomical abnormalities include those associated with deviated nasal septa, cystic middle turbinates, narrow nasal passages and spurs. We have had cases of severe headache relieved after performing a simple submucous resection and relieving pressure points. This usually occurs with high deviations. Cystic middle turbinates which are mor-

phologically produced in the process of development of the ethmoids may increase in size indefinitely and when wedged in a narrow nose produces pressure symptoms.

New growths in the nose very soon produce pressure sufficient to cause pain. The growths most commonly met with are sarcoma, gummata, carcinoma, ademantinoma and cysts.

A discussion of the clinical diagnosis of nasal pathology that might cause headaches, can only be touched in a few salient points. A patient with acute sinusitis will usually give a history of recently contracting a head cold—the nasal passages have a tendency to close up, there is a profuse mucous or muco-purulent discharge, there is a sense of fullness in the region of the sinuses, with a tendency to be worse at morning and better in the evening. There may or may not be a low degree of fever. The temperature may be subnormal and especially when only the frontal sinus is involved. The general condition of the patient however is usually better than might be expected when compared with his discomfort.

Headaches accompanied with dizziness are suggestive of an infectious process of the sphenoidal sinus. We recently had a patient complaining of headache and vertigo, causing him to staggar as he walked along the street. Pus was discharging from his sphenoidal and frontal sinuses. The sinuses were operated upon and thoroughly drained. The headache and vertigo immediately cleared up and did not return.

Chronic sinusitis is not so frequently accompanied by headache as the acute process. The pain experienced is usually of the neuralgic type, and is more constant in its course.

In the group of headaches due to the so-called hyperplastic ethmosphenoiditis the only pathology present is hyperplasia of the tissues involving the nasal or Meckel's ganglion and the surrounding tissue. To determine whether or not this hyperplastic condition is responsible for headache it is only necessary to cocainize the ganglion and note the effect. Let us observe however that there are patients of neurasthenic type, whose headaches subside as a result of the mental suggestion rather than the anesthetic effect of the cocaine. This we have seen demonstrated in patients by applying solutions having no anesthetic effect, over the nasal ganglion and the patients stated their headaches were entirely relieved by it. In the same type of individual we have seen headaches, complained of constantly, and over a long period of time, disappear more or less permanently as a result of the injection of novocaine into the tissues around the nasal ganglion. We have in mind, now, a patient who had complained of a persistent headache for several years, and after the injection of novocaine, declares after several months, he has had no return of the symptom. Such a phenomenon could be explained on no other ground than mental suggestion since there is no healing effect in the novocaine and no permanent effect of its injection in the nervous tissue. With patients of this type it would be very easy to go astray in our conclusions as to the cause of the headaches.

In the field of the internist come the headaches associated with acute febrile conditions, general toxemias, blood vascular changes, and others which we shall not attempt to mention. The modus operandi of how the headache is produced in such conditions as have just been named, is not within the province of the internist to explain, yet for all practical purposes it can be effectively treated by measures which are perfectly familiar to all of you.

A small percentage of cases of headache come in the field of the endocrinologist. These chiefly come in three groups: First, those with hypothyroid secretion; second, those with hypofunction of the anterior pituitary lobe, and third, those with hypo-

function of the anterior pituitary lobe combined with a hyperfunction of the posterior pituitary lobe. These pathologic conditions can be determined by a general physical examination, noting any evidence of gigantism or cretinism, and also evidences of lack of thyroid secretion. It is believed by some good clinicians, and not without foundation, that ovarian deficiency is responsible for a certain small percent of headaches. In our clinic recently a patient who had complained of intractible headaches over a long period of years, in spite of numerous courses of treatment, in the course of the history taking, made a statement to the effect that the headaches were less severe just preceding the menstrual period. This suggested the possibility of ovarian deficiency as having some relationship to the cause of the headache. Ovarian extract was administered with the result that the headache entirely disappeared. In the light of our knowledge concerning the relation of the body to ovarian extract this may have been due to mental suggestion.

Within the province of ophthalmology it is no novel statement to say that headache is of very frequent occurrence. This is especially true of patients within school age. The most common cause is eye strain. Any school child that complains of persistent headaches without apparent cause in the course of the physical examination should be sent to an oculist for refraction. Thanks to our friends, the opthalmologists, the public is becoming so well educated upon the question of eye strain that we are always assured of hearty co-operation on the part of the patients in having them properly treated. There are other eye conditions, viz: iritis glaucoma and other inflammatory conditions in which headache is a prominent symptom we will merely mention.

The syphilologist meets with headache in secondary and tertiary syphilis. Sometimes it is the only symptom suggesting this disease, and is usually characterized by appearing in the morning and persisting throughout the day. In this connection I recall an interesting case that came under my observation while doing general practice. I was examining a woman and her husband was present. She gave a clear history of tertiary syphilis and was asked to have a Wassermann test. After her examination he remarked that the part of her history relating to headaches corresponded very closely with his own experience and asked if he, too, might have a blood test. Both returned a 4 plus Wassermann reaction.

The part which the dentist plays in the subject of this paper is largely with the neuralgic type of headaches due to focal infection, which have been discussed. The dental pathology is most often found to be apical abscesses, necrosis of alveoli and periostitis.

Those cases of headache to which the neurologist falls heir may be placed in three groups. First, those due to intracranial pressure; second, those due to neuralgia of the cranial nerves, and third, those in other miscellaneous conditions such as uremia, polycythemia, arteriosclerosis, fatigue states, constipation, migraine and other conditions. The sensory nerve fibers of the dura are principally branches of the fifth nerve. Headaches of intra-cranial origin are due to pressure or stretching upon the dura, since the brain substance itself has no sensation. Most frequent in this group of cases are the various types of meningitis, brain abscess, hemorrhages into the brain substance and brain tumors.

Neuralgias of the cranial nerve affect principally the fifth nerve. The most striking example of these is that affecting the Gasserian ganglion and producing the classical tic douloureux. The etiology of these neuralgias is found to be foci of infection located in the paranasal sinuses, teeth,

tonsils and elsewhere about the head. The neuralgic headaches are recognized by the type of pain, the nerve distribution and by tenderness on pressure. A neuralgic pain is usually affected by the application of heat or cold.

In the miscellaneous group above referred to the headaches occurring in uremia, polycythemia, and arteriosclerosis, can be accounted for on the basis of increased intra-cranial pressure. As an evidence of this fact it has been shown that by the use of a saline purge in uremia and polycythemia the headache is relieved and at the same time the intra-cranial pressure is lowered. It has also been demonstrated that in arteriosclerosis there is increase in pressure in the spinal fluid which would obviously result in increase in the intra-cranial pressure. In constipation and fatigue states no attempt is made to explain how it is brought about. The treatment, however, is self-evident.

Migraine: The writer believes migraine is of much more frequent occurrence than is recognized. It so often similates the headaches of nasal origin that it is very important clearly to establish the differentiation. Its pathology cannot be demonstrated. It is generally admitted that it is due to spasm of cerebral vessels in patients suffering with vasomotor disturbances. The term migraine should be used to refer to a definite clinical entity and not used loosely to refer to any type of headache. Migraine is a periodic type of headache which is inherited according to the Mendelian law. It most frequently puts in its appearance at the age of puberty and tends to disappear or become less or to change into a neuralgic type around the 40th year. An attack usually comes on in the morning and is frequently ushered in by scotomata. It is a dull throbbing ache which may involve one-half of the head (true hemicrania) or involve the entire head. The supraorbital region is the part most frequently affected. The patient experiences nausea and even vomiting, dizziness, and photophobia. The ears seem hyperacute to noises. There is an ophthalmoplegic type of migraine in which the patient may develop a temporary diplopia. The severity of the attack may vary from a very mild degree to a severity almost beyond human endurance. The part of the head involved usually becomes quite tender to touch. For this reason it is often confused with neuralgic headaches and attributed to nasal pathology. Migraine often has congestion of the nasal mucosa and mucous discharge simulating an acute rhinitis. There is this distinction, however: The congestion in migraine occurs over the septum to as great a degree as over the sinuses. This is not true when the sinuses are involved.

SUMMARY.

1. Classification of headaches or any other basis than that of the pathology of the diseases with which they are associated, leads to confusion.

2. Rhinologist should accept responsibility for treating only those cases of headaches in which nasal pathology can be demonstrated as the cause.

3. The results of treating neurasthenic patients are often misleading in that their responses are due more to the mental suggestion than to the efficacy of the therapeutic measures used.

4. Headaches must be taken with other symptoms in order to arrive at a proper diagnosis of the underlying cause.

5. Migraine is a distinct clinical entity and should be recognized and treated as such. It is so similar to certain types of headache of nasal origin as to cause much confusion.

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MONROE—IDEAL HOST.

"The greatest meeting ever," was the unanimous verdict both of delegates and members attending the annual meeting of the Louisiana State Medical Society in Monroe recently. It was evident from the moment the curtain was rung up that the medical profession of Monroe meant to spare neither time nor expense in order that the visitors might have an enjoyable, as well as profitable, stay.

The beautiful Hotel Virginia which served as headquarters is a hostelry that would do credit to any metropolis, and the new court house building which harbored the scientific sections as well as the commercial exhibits proved most adequate. Dr. C. P. Gray, President of Ouachita Parish Medical Society, and general chairman of the committee for arrangements, rendered yeoman service and contributed in no small degree to the success of the meeting. His flow of oratory at the public meeting, on the night of the first day of the convention, proved him a speaker of sufficient eloquence to vie with the guests of honor who graced the occasion. Dr. R. W. O'Donnell, chairman of the committee on exhibits, displayed his usual good taste in making this feature of the meeting attractive. Dr. D. I. Hirsch, chairman of the entertainment committee, proved a prince among hosts and it will be many a day, unless the editor misses his guess, before the society finds his equal. Dr. F. C. Bennett, of the advisory committee, was ever present to impart his sage-like counsel to those who needed it. Dr. T. E. Wright, chairman of the arrangement committee, saw to it that nothing was rearranged and succeeded well in his task. With Dr. J. B. Vaughan, chairman of the finance committee, we had little dealing but I am sure that his coffers must have been overflowing if we can judge by the out-pouring of good things we enjoyed at Monroe. Dr. A. G. McHenry, chairman of hotels, did himself proud in seeing to it that each guest was most comfortably situated. Dr. J. E. Walsworth, chairman of publicity, must wield a mighty influence with the papers of his city for the local press was more than liberal in contributing space, as well as photographs, dealing with the most prominent features of the convention.

As was stated at the beginning, a wonderful time was had by all and no sacrifice appeared too great for the hosts in order to make us all feel welcome. Not least among the things they did, we might note the following circumstance: At the close of the morning session of the second day it was found that we were going far behind with the program and it appeared as though a special night session would have to be

called in order to give each essayist his equitable share of the time permitted by the society to read his paper. This was naturally objectionable and Dr. B. M. McKoin and Dr. C. P. Gray, both of Monroe, very tactfully demonstrated their usual Southern chivalry in requesting that the chairman withdraw their papers from the program, so that the visiting guests might have ample time to present theirs. It was in such big-hearted acts as the one just enumerated that made us feel very much at home in Monroe. And it is just such little courtesies as these that helps to bring us closer together and make us feel, as time goes on, that the petty things of life, more and more are being relegated to dark corners to rest undisturbed. Last but not least, we owe our thanks to the ladies of Monroe for the wonderful entertainment they furnished, not only to the visiting ladies but also to the members of our society. Mrs. J. E. Walsworth, chairman, and Mrs. A. J. McHenry, secretary, respectively, of the ladies' committee, and their corps of co-workers, are entitled our thanks for their gracious reception and entertainment. We hope to come back to Monroe some time in the not far distant future and again brouse in an easy-chair surrounded by the luxury to be found in the Lotus Club—that peer among clubs in this north Louisiana city.

So we could go on and on attempting to depict to you, in a most inadequate fashion, the sort of time we had in Monroe. Unless you were there, I feel that we could not make you understand. So many of our physicians in the Pelican State look upon our State Meeting as something provincial and therefore do not attend. That such a misconception should still prevail in the minds of some of our members is indeed regrettable. When we look upon the feast of oratory and learning that was imparted to us at this meeting by such master-minds as Wm. J. Mayo, W. D. Haggard and Rudolph Matas, we can only feel sorry for those who were not present.

If you missed this year, do not repeat the omission next year. Lay your plans now and allow nothing to interfere with your coming to New Orleans, in April 1927, for you will find in the Crescent City a warm welcome, a superabundance of entertainment and, we trust, a scientific program that will be of such value that you will find it irrational to stay away.

THE JOURNAL.

At the Monroe Meeting a report was made by the Journal Committee showing a balance in bank and generally favorable conditions. The House of Delegates showed their confidence in the management of the publication by granting a $1.00 member rate in place of the former grant of 75 cents. This action the Committee gratefully acknowledges in expressing its appreciation.

What should the Committee do to make the most of the wave of prosperity on which this young State Journal is riding? It is important to make the most of a favorable situation. How shall this be done in the present case? For one thing, the Committee plans to remove a source of annoyance and irritation to writers of papers by providing free of all cost cuts and space for all illustrations up to 72 square inches for one article. It is necessary to make some limit in the interest of fairness, and this is believed to be a liberal allowance, sufficient for the great majority of papers.

Announcement has already been made of the plan to publish at 1/2 cost the transactions of the Staffs of Louisiana and Mississippi Hospitals, rated as Class A by the A. M. A. and the American College of Surgeons. Their work in standardizing our homes for the sick is among the best medical activities of this century. It is a pleasure to be able to co-operate with these splendid organizations in such a good work.

It is hoped to improve the reading matter by procuring papers from the pens of authoritative writers in various lines.

While excellent work has been done by the present Editors without remuneration, it is the belief of the Committee that ultimately it should be our aim to have a paid staff able to give ample time to the selection and preparation of the papers to be published and to editorial and other special departments. In this and in other ways to be devised, an effort will be made to produce the very best results possible with the means at the command of the Journal Committee.

MORE RURAL HOSPITALS NEEDED.

Pioneer work done by many farming communities in establishing rural hospitals has been investigated by the Department of Agriculture, with the object of encouraging similar action in localities which at present are without hospital facilities. Although the movement for the establishment of rural hospitals is definitely under way, it has been checked by the increase in building and equipment costs resulting from war conditions, and by the necessity for economy in local government. Farming communities are urged not to sacrifice health to their desire for economy. It is not really economical to dispense with hospitals.

As indicating the need for better rural hospital facilities, the department draws attention to the fact that there is a growing shortage of country doctors. Graduates in medicine, after going through an expensive and lengthy specialized training, prefer city practice where up-to-date medical facilities are available. They feel that to practice without these facilities is to sacrifice much of the value of their training. Accordingly, a necessary step in combating the abandonment of country practice by doctors, is to furnish adequate hospital facilities in the country.

Not more than 12 per cent of the rural population of the United States, it is said, enjoys anything like modern health supervision. Forty Kentucky counties in 1924 were reported to be without adequate medical service. One of these counties had not a single doctor. In a Montana county of 5,000 square miles, there were only three doctors and no hospitals. In Minnesota 127 small villages were reported to be without doctors. Similar conditions existed in the Dakotas. This situation is believed to be largely due to the fact that modern medical education is developing physicians who will not consent to dispense with the advantages of up-to-date clinics and laboratories.

Credit for taking the initial step in a movement to satisfy the requirements of the modern physician in this respect is given to Washington county, Iowa, which was the first county in this State to take advantage of the State hospital law passed in 1909. This was the first law of its kind enacted anywhere in the United States. It authorized counties to tax themselves for hospital purposes. Under the law Washington county proceeded at once to erect a modern hospital which is now in successful operation. Prior to that time Iowa had only one hospital bed for every 3,000 people in the small towns and rural districts. Thirty-two counties had not a single hospital bed. Since then 16 other States have passed laws similar to the Iowa law, and many rural hospitals have been built. Forty were studied by the investigators in making the rural hospital survey.

Rural hospitals have been of particular value in maternity cases. Although the city death rate in the United Staes has decreased, the rural death rate, according to health authorities, is stationary. This is largely due to the prevalence of child and maternal mortality on farms. It has been estimated that 750,000 women annually pass through child birth in the United States without medical attention. A large proportion of these women live on farms.

There is no doubt, says the department, that the mortality rate among them could be greatly reduced by the provision of adequate medical and hospital facilities. Neglect of motherhood is also held responsible for many of the physical defects of children. Country school children, according to medical authorities, are handicapped by more physical defects than are the children of the city. It is considered significant, too, that, for the first time in the history of American vital statistics, the country in 1921 had a higher death rate for babies under one year than the city.

In a report on the country hospital situation, the department describes county hospitals supported by taxes; county hospitals connected with country homes; township hospitals; town hospitals; district hospitals; community hospitals; and hospitals supported by arrangement between communities and physicians. These are all doing good work in the various circumstances to which they have been adapted. Generally, says the department, the best satisfaction is given by rural people by hospitals in which they have a direct interest. Town hospitals are usually open to the farm population in neighboring territory, but are apt to be looked on by the farmers as not primarily intended for them. Trustees controlling town hospitals are urged to make their availability known to farmers.

An interesting development is the formation of hospital districts, where county and township lines make local political communities too small for efficient public service. One such district hospital has been established at Berea, Ohio, by communities in two counties. Six distinct political subdivisions are included in the hospital district, which was formed under a State law passed for the purpose. A new hospital building was erected at a cost of $110,000. Community hospitals built by public subscription or by organizing stock companies and selling shares to a large number of the community have been successful. They compare favorably with other rural hospitals, says the department. One such hospital has been established at Hutchinson, Minn. An interesting event which occurred at the dedication of this hospital is recorded. Little Crow, leader of an Indian band that massacred the citizens of Ulm, Minn., in 1862, also led a band that burned the stockaded frontier hamlet of Hutchinson. At the dedication of the Hutchinson community hospital, a speech was made by Flying Earth, a granddaughter of Little Crow and a trained nurse in a Minnesota hospital. Flying Earth expressed regret for the act of her grandfather, and characterized the hospital as a "place to heal all wounds."

Southern mountain hospitals have done fine work where they have been established. Much ill health in the mountain districts has come from poor light and insufficient heat in homes. absence of sanitation, ignorance of dietetics, ignorance of the transmission of disease, early marriages with high infant and maternal mortality, and the absence of modern doctors, trained nurses, hospitals, dispensaries and clinics. In one North Carolina county of 10,566 inhabitants, out of about 5,000 people who were examined for hookworm 42 per cent were found to be infected. Of 816 school children, 2.3 per cent were suffering from trachoma, a contagious disease of the eye. Rural hospitals and dispensaries are now being introduced, often as the result of devoted work by nurses and doctors. Health and medical officers are increasingly taking notice of the health problem presented by the 50,000,000 people living in rural territory. New State laws are removing legal obstacles to the establishment of rural hospitals, and a movement to multiply their number is under way. Much has already been done to make farmers realize the value of hospitals and to remove old standing prejudices against them.

LEGISLATIVE HOKUS-POCUS.

If the legislature were to pass a bill prohibiting the teaching that the earth is round in state-supported schools, would that make it true and would that help to reduce the present stigma of our fair state of Louisiana in regard to its low rank in literacy? If it were to pass a resolution declaring George Washington a myth, would that prove all our historians to be liars? These thoughts are inspired by the bill, recently introduced at Baton Rouge, fashioned after other so-called "monkey bills," for the purpose of preventing the teaching of the FACTS of evolution in our state-supported schools.

The ridiculousness of the ideas of the exponents of such thoughts can best be combatted by such calm and sane articles as are contained in the work of the venerable Dr. W. W. Keen of Philadelphia, entitled, "I Believe In God and In Evolution," printed by Lippincott in 1922, to which we referred in an editorial, in the columns, two years ago. Dr. Keen, in this little book, shows his intensely religious leanings, with his reference for God and the Bible, yet, he explains so carefully and in such simple terms, how his feelings in these respects do not cause him to overlook scientific truths, as he has seen them in his own daily work, as illustrated in surgery, embryology, etc. He even goes so far as to show the relationship of plant life, in some respects to that of human. It will pay every physician to own a copy of this book, so as to be able to lend it to his friends who need the education and, especially, to his legislators, if they are doubtful or doubting Thomases. One phase of the subject which Dr. Keen does not mention and one which is often overlooked is that of duodenal ulcer; its common occurrence in "us bipeds" is well known, whereas it is said to be absent in quadrupeds; therefore, in view of the fact that it ill becomes us to walk on all fours, the only way we can take the traction off this part of the intestinal tract and, thereby minimize its hazardous strain, which makes it a "locus minoris resistentiae," is by resting in the prone position. Is this not proof sufficient that when the Great Architect of nature designed the intestinal tract, with its little curved duodenum, He intended that it should be carried in an horizontal rather than a perpendicular abdomen?

To medical men, the utter ridiculousness of the legislative bill presented is apparent, but many non-medical people do not appreciate the fact that evolution is true, not a theory; these people must be convinced and, perhaps most of all, they must be convinced that these facts are not incompatible with religion and Biblical teachings—and this is where Dr. Keen's work fits in so nicely.

When legislators learn that their functions are constructive, not destructive of the truth, then we need never have any fears of enactment of such legislation as that proposed. Fortunately, here in Louisiana and in Mississippi, the large majority of them are fair-minded men, who realize that it is not in their domain—and they do not wish it to be so—to combat science and progress.

HOSPITALS OF LOUISIANA AND MISSISSIPPI

Through the courtesy of the Council on Medical Education and Hospitals of the American Medical Association, we are pleased to reprint for our readers their survey of our hospitals in Mississippi and Louisiana. The material is taken from the "Hospital Number" of *The Journal of the A. M .A.* which appeared April 3, 1926. The list names the hospitals that are available for active medical and surgical service; includes general medical and surgical hospitals; also those for tuberculosis, nervous and mental diseases, maternity, orthopedic and pediatric.

Hospitals marked on the maps with dots represent those for community use, those marked with a cross are for tuberculosis, the triangle signifies nervous and mental disease hospitals, those charted with a circle were established since 1920. In the lists, those hospitals marked with a star are approved by the Council on Medical Education and Hospitals for internship or the fifth year in medicine.

The total hospitals in Louisiana are 67; for community use, 49; population per hospital bed, 378; percentage of beds occupied, 65; percentage of parishes without hospitals, 65.6.

The total hospitals in Mississippi are 66; for community use, 52; population per hospital bed, 778; percentage of beds occupied, 56; percentage of counties without hospitals, 62.2.

The bed capacity of these hospitals and the daily average in constant use during the year 1925 were as follows:

LOUISIANA.

	Total Beds	Av. Beds in Use
Abbeville,3,461—Vermilion		
La Grande Hospital	20	16
Vermilion Sanitarium	20	4
Alexandria, 20,651—Rapides		
Baptist Hospital	60	34
Baton Rouge, 27,832—E. Baton Rouge		
Baton Rouge General Hospital	30	15
Our Lady of the Lake Sanitarium	100	45
Bogalusa, 8,245—Washington		
Eliz. Sullivan Memorial Hospital	80	66
Covington, 2,942—St. Tammany		
The Dradom Tuberculosis Sanatorium	16	5
Crowley, 6,108—Acadia		
Crowley Sanitarium Co., Ltd.	16	10
De Ridder, 3,535—Beauregard		
Dr. Ridder Sanitarium	16	6
Elizabeth, 3,000—Allen		
Elizabeth Hospital	18	12
Eunice, 3,272—St. Landry		
Eunice Sanitarium	24	6
Fisher, 1,200—Sabine		
West Louisiana Sanitarium	35	10
Greenwood, 250—Caddo		
Pines Sanatorium (T.B.)	80	45
Haynesville, 903—Claiborne		
Haynesville Hospital	36	10
Homer, 3,305—Claiborne		
Homer Sanitarium	10	5
Hygeia, —— —St. Tammany		
Camp Hygeia, Orleans Anti-Tuberculosis League	50	40
Lafayette, 7,855—Lafayette		
Lafayette Sanitarium, Inc.	23	9
St. John Hospital	33	20
Lake Charles, 14,015—Calcasieu		
St. Patrick Sanitarium	75	30
Lecompte, 1,034—Rapides		
Lecompte Sanitarium	10	8
Mansfield, 2,564—De Soto		
Mansfield Sanitarium	32	20
Monroe, 14,347—Ouachita		
Riverside Sanitarium, Inc.	50	35
St. Francis' Sanitarium	125	69
Natchitoches, 3,388—Natchitoches		
Natchitoches Sanitarium	25	14
New Iberia, 6,278—Iberia		
Dauterive Sanitarium	15	8
New Orleans, 414,493—Orleans		
City Hospital (N. & M.)	100	80
Charity Hospital of Louisiana*	1300	1189
E. E. N. & T. Hospital	66	17
Flint-Goodrich Hospital	51	30
Hotel Dieu Hospital*	269	170
Illinois Central R.R. Hospital	60	35
Leonce M. Soniat Mercy Hosp.	64	55
Louisiana Retreat (N. & M.)	240	240
New Orleans Convalescent Home	30	23
New Orleans Hospital & Dispensary for Women and Children	35	27
Presbyterian Hospital	100	67
Southern Baptist Hospital	218	New
St. Rita Surgical Infirmary	50	25
Touro Infirmary*	366	208
Opelousas, 4,437—St. Landry		
St. Landry Sanitarium	20	15
Patterson, 2,538—St. Mary		
St. Mary's Hospital	30	22
Shreveport, 57,857—Caddo		
Highland Sanitarium, Inc.	85	51
Mercy Sanitarium (Colored)	18	2
North Louisiana Sanitarium	100	75
T. E. Schumpert Memorial Sanitarium*	200	115
Shreveport Charity Hospital*	218	199
Shriners Hospital for Crippled Children	55	54
Tri-State Sanitarium	75	30
Total for community use, 49	4749	3271

In Louisiana the following forty-two parishes have no hospitals for community use: Ascension, Assumption, Avoyelles, Bienville, Bossier, Caldwell, Cameron, Catahoula, Concordia, East Carroll, Evangeline, Franklin, Grant, Iberville, Jackson, Jefferson, Jefferson Davis, LaSalle, Lafourche, Lincoln, Livingston, Madison, Morehouse, Plaquemines, Pointe Coupee, Red River, Richland, St. Bernard, St. Charles, St. Helena, St. James, St. John the Baptist, Tangipahoa, Tensas, Terrebonne, Union, Vernon, Webster, West Baton Rouge, West Carroll, West Feliciana, Winn.

MISSISSIPPI.

	Total Beds	Av. Beds in Use
Aberdeen, 4,071—Monroe		
Acker Hospital	10	1
Coleman Hospital	15	4
Amory, 2,861—Monroe		
Gilmore Sanitarium	30	12
Biloxi, 12,571—Harrison		
Biloxi City Hospital	35	16
Booneville, 1,495—Prentiss		
North East Mississippi Hospital	32	15
Brookhaven, 4,706—Lincoln		
King's Daughters' Hospital	30	15
Clarksdale, 7,552—Coahoma		
Clarksdale Hospital	22	6
Columbia, 2,826—Marion		
Columbia Hospital	35	25
Columbus, 11,358—Lowndes		
Columbus Hospital	30	10
Fite Hospital	25	11
Corinth, 4,946—Alcorn		
The McRae Hospital, Inc.	40	13
Greenville, 15,165—Washington		
Greenville Sanitarium	20	15
King's Daughters' Hospital (White)	45	44
King's Daughters' Hospital (Colored)	28	25
Greenwood, 7,793—Leflore		
Greenwood Colored Hospital	14	9
King's Daughters' Hospital	25	15
Gulfport, 8,157—Harrison		
King's Daughters' Hospital	118	35
Hattiesburg, 14,084—Forrest		
Methodist Hospital	35	21
South Mississippi Infirmary	60	40
Houston—1,408—Chicasaw		
Houston Hospital, Inc.	50	22
Jackson, 23,698—Hinds		
Jackson Infirmary	85	25
Medical & Surgical Clinic	50	15
Mississippi Baptist Hospital	100	55
Mississippi State Charity Hosp.*	100	75
Laurel, 15,713—Jones		
Dr. Roland Cranford's Hospital	55	45
South Mississippi Charity Hosp.	150	95
Lumberton, 2,192—Lamar		
Lumberton Hospital, Inc.	68	57
McComb, 6,237—Pike		
McComb City Hospital	30	12
McComb Infirmary	36	10
Meridian, 24,312—Lauderdale		
Dr. Hairston's Hospital	35	28
King's Daughters' Tuberculosis Hospital	44	35
Meridian Sanitarium	50	15
Rush's Infirmary	60	16
Turner Hospital	50	30

Natchez, 13,070—Adams		
Natchez Hospital*	130	90
Natchez Sanatorium, Inc.	40	20
New Albany, 2,531—Union		
Maye's Hospital	30	14
Newton, 1,604—Newton		
Newton Sanitarium	20	10
Oxford, 2,150—Lafayette		
Bramlett Hospital	20	8
Oxford Hospital	25	10
Poplarville, 1,290—Pearl River		
Pearl River County Hospital	20	10
Rosedale, 1,696—Bolivar		
King's Daughters' Hospital	10	5
Rosedale Hospital	10	5
Tupelo, 5,055—Lee		
Tupelo Hospital	35	12
Vicksburg, 18,072—Warren		
Mississippi State Charity Hosp.*	110	110
Vicksburg Infirmary	50	40
Vicksburg Sanitarium	75	40
Water Valley, 4,064—Yalobusha		
Water Valley Hospital	12	5
West Point, 4,400—Clay		
Ivy Hospital	24	12
Winona, 2,200—Montgomery		
Winona Infirmary	40	15
Yazoo City, 5,244—Yazoo		
Yazoo Hospital	30	15
One General Hospital of less than 10 beds	8	4
Total for community use, 52	2301	1292

In Mississippi the following fifty-one counties have no hospitals for community use: Amite, Attala, Benton, Calhoun, Carroll, Choctaw, Claiborne, Clarke, Copiah, Covington, DeSoto, Franklin, George, Greene, Grenada, Hancock, Holmes, Humphreys, Issaquena, Itawamba, Jackson, Jasper, Jefferson, Jefferson Davis, Lawrence, Leake, Madison, Marshall, Neshoba, Noxubee, Oktibbeha, Panola, Perry, Pontotoc, Quitman, Rankin, Scott, Sharkey, Smith, Stone, Sunflower, Tallahatchie, Tate, Tippah, Tishomingo, Tunica, Walthall, Wayne, Webster, Wilkinson, Winston.

TRANSACTIONS OF ORLEANS PARISH MEDICAL SOCIETY

MAY.

During this past month of May the Board of Directors held one meeting and there were two scientific meetings of the Society.

The Board of Directors still has under consideration the proposed revision of the Constitution and By-Laws, and it will probably be several months before this revision is completed sufficiently to be referred to the vote of the General Body.

Dr. Geo. DeReyna, Dr. E. S. Peterman and Dr. Edmond Souchon were elected to Active Membership.

The auditing of the books by Mr. L. L. Jarreau has been completed and his report is published in full in this issue.

The State Legislative Committee and the Hospital Abuse Committee are quite active at Baton Rouge and it looks as if some favorable action will be taken on matters which they are interested in.

At the Scientific Meeting held May 10th the program was as follows:

"Epidemic Jaundice"..... By Dr. John H. Musser

Dr. Frank L. Cato opened the discussion

"Acute Pyogenic Infections of the Bones and Joints in Childhood"..... By Dr. Eramus D. Fenner

Dr. Muir Bradburn opened the discussion

At the Scientific Meeting held May 24th the following papers were presented:

"Color Acuity—To Differentiate Headache as Symptom of General Disease from One of Special Sense"..... By Dr. M. Earle Brown

"Agina Pectoris — Its Treatment. Lantern Slides"..... By Dr. John Humber

"Breast Abscess"..... By Dr. Walter E. Levy

A vote on the question of a domicile is coming in slowly, although a second ballot has been sent to those who have not responded to the first. To those who have not sent in a reply to the second ballot we earnestly ask that they give this their immediate attention, and return same to this office.

The total membership is 479.

REPORT OF TREASURER FOR APRIL.

Actual Book Balance 3/31/26	$3,149.13
Receipts during April	1,255.25
Total receipts	$4,404.38
Expenditures	$918.93
	$3,485.45
Outstanding checks:	$344.50
Amount brought forward	3,829.95
Receipts since Bank Balance	43.00
Bank Balance 4/28/26	$3,786.95

REPORT OF LIBRARIAN FOR APRIL.

During the first part of the month the Library was in constant use in the completion of papers for the State Medical Society and the American Medical Association. Since the 15th there has been a post-conference lull, enabling Miss Marshall to complete several bits of technical work which had of necessity been neglected during the reference rush. Three bibliographies have been prepared on subjects as follows:

Injuries to the Female Perineum resulting from Childbirth—Episiotomy.

Intracranial Hemorrhage in the Newborn.

Therapeutic Use of Tryparsamide.

Forty-three volumes of journals have been prepared and sent away for binding.

Twenty-six volumes have been added to the Library during the month. Of these sixteen were received by gifts, one by purchase, and nine from the New Orleans Medical and Surgical Journal.

A list of accessions is as follows:

Medical Society of the State of New York. 1863-64, 1866, 1868, 1873, 1890.

New York State Medical Association. 1890.

Proceeding of the Nebraska State Medical Society. 1891, 1897-98.

Transactions American Physicians and Surgeons Congress. v. 9-10. 1913-16.

Lynch—Medical Department of U. S. Army in the World War. v. 8.

Hirschman—Diseases of the rectum. 4th ed. 1926.

McClintock—Pleomorphism in bacterial protoplasm. 1926.

Hogben—Comparative physiology. 1926.

Moynihan—Abdominal operations. 2 v. 1926. 4th ed.

Hanson—Treatment of Head Injuries. 1925.

Seelig—Medicine: An historical outline. 1925.

Crummer—Clinical features of heart disease. 1925.

Bureau for increasing use of quinine—Chininum. 1926.

Young—Practice of Urology. 2 v. 1926.

H. THEODORE SIMON, M. D.,
Secretary.

Report of the Examination of the Books and Accounts of the Orleans Parish Medical Society.

New Orleans, La., April 30th, 1926.

To the President and Board of Directors, Orleans Parish Medical Society, New Orleans, La.

GENTLEMEN:

As requested, I have audited your books and records for the twelve months ending December 31st, 1925, and the result of my examination is set forth in the following statements:

FINANCIAL CONDITION.

The financial condition of your Association at December 31st, 1925, is set forth under the caption "Assets," folio 1, and reflects a net worth of $63,199.72.

Bonds	$35,500.00	
Cash (Gen. Fund)	484.15	
Cash (Lib. Fund)	582.64	
Cash, Petty in office	10.11	
Medical Relief Fund	96.23	
		$36,673.13
Inventories (Gen. Fund) Fixtures		579.63
Inventories (Lib. Fund) Fixtures		1,826.05
Inventories (Lib. Fund) Books		24,120.91
		$63,199.72

The Inventories are listed at book value and no allowance has been made for depreciation.

Respectfully submitted,

L. L. JARREAU,
Auditor.

ASSETS.

Domicile Fund				
4¼ % Second Liberty Bonds				$30,000.00
General Fund				
Medical Relief Fund			$96.23	
Cash in Bank			484.15	
Petty cash in office			10.11	590.49
Inventory at 12/31/24		$470.75		
Less fans and rugs discarded (worn out)	$35.00			
Less old typewriter given in exchange together with $65.53 for a new one	50.00	85.00		
		385.75		
Acquired in 1925				
Table Lamp and Screen		11.50		
Translux Screen, 50x60		90.85		
Typewriter		83.03		
Door Check		8.50		579.63
Library Fund				
6% Union Bag & Paper Co. Bond		1,000.00		
7% Sinclair Oil Co. Bond		1,000.00		
6% Mo. Pacific R. R. Co. Bond		500.00		
Holland American S/S Co. Bond		1,000.00		
Acquired in 1925				
6% Georgia Baptist Hopital		1,000.00		
6% St. Charles Ave. Baptist Ch.		1,000.00		5,500.00
Inventory of Fixtures				
Inventory at 12/31/24	1,566.00			
Increased in 1925	260.05	1,826.05		
Inventory of Books				
Inventory at 12/31/24	23,125.20			
Increased in 1925	995.71			
Inventory at 12/31/24	24,120.91			
Cash in bank		582.64		26,529.60
Total worth of Association				$63,199.72

INTERN MEMBERSHIP.

Elected in 1925.

Beyt, Frank Joseph; Cohen, Hyman Leon; Flowers, Wm. Wilson; Granbarth, Julian; Hill, Robert Carl; Johnson, James Arthur; Knolle, Guy Edmund; Lawson, Edwin Hugh; Lockard, James Nicholas; Lucas, John Frank; McNair, Spencer Butterfield; Miller, Morrell Walso; Tardo, Cosmo Joseph; White, Herman A.; Young, Marion Albert, Jr.

DOCTORS ELECTED TO MEMBERSHIP IN 1925.

Aleman, Ruth Gertrude; Aiken, Gayle; Alsobrook, Henry B.; Azar, Alexander James; Brant, George Bass; Breaux, Thomas Wm.; Brown, Marion Earl; Browne, Donovan C.; Cox, Charles L.; Crebbin, Alex Ramsey; Davidson, Julius Meyer; Genella, Louis Julian; Giles, Euclid Barland; Granberry, Carl; Henderson, Walter F.; Hermann, George R.; Hyman, Earl; Kibbe, Pressley A.; Liles, Royal Thomas; Lorio, Frank Leo; Lines, David Arthur; Lyons, Shirley Carlton; Magee, Henry; Musser, John Herr; Perrier, Claude V.; Pigott, James F.; Palmer, Nathan Hirsch; Russell, Richard Olney; Thomas, Albert R.; Tumbleson, Talbot Austin; Tyrone, Curtis Hartman.

Thirty-one new members elected in 1925.

MEMBERS DISMISSED FOR NON-PAYMENT OF DUES.

Members dismissed for non-payment of dues, 8.

RESIGNATIONS.

Ferran, J. B.; Edward, Dorothy; Kahn, A. M.; Naef, Emile; Neves, George; Rodick, J. C.; Williams, Charles L.

REINSTATED MEMBERS.

Lewis, J. A., May 4th, 1925; Williams, H. Robin, May 4th, 1925; Thomason, Louis M., Jun. 9th, 1925; Salerno, E. F., Aug. 25th, 1925; Halsey, John T., Aug. 25th, 1925; **Swords, M. W., Aug. 25th, 1925.

**Dr. Swords never qualified.

DECEASED MEMBERS.

Braud, Sidney F., died May 18th, 1925; Clark, S. M. D., died May 1st, 1925; Hubert, J. M., died Mar. 2nd, 1925; Michinard, P., died Feb. 10th, 1925; Moore, P. A., died Feb. 11th, 1925; Feingold, M., died Dec. 26th, 1925.

INVENTORY OF FIXTURES AND BOOKS.

Library Account.

Inventory of books at Dec. 31st/24	$23,125.20
Purchase made in 1925	995.71
Total inventory at Dec. 31/25	$24,120.91

INVENTORY OF FIXTURES.

Three (3) Wooden Reading Tables	$9.00	
Nine (9) Chairs	9.00	
One (1) Oil Stove	4.00	
Twenty-two (22) Wooden Shelves	100.00	
One (1) Ink Well	.50	
Thirteen Rows Steel Filing Shelves	1,000.00	
Two (2) Rows Wooden Shelves	50.00	
One Catalogue Case and Stand	125.00	
One (1) Book Truck	50.00	
One (1) Flat Top Desk	30.00	
One Chair, $3.50	3.50	
One (1) Underwood Typewriter	50.00	
One (1) Steel Filing Case	35.00	
One (1) Cardboard Filing Boxes	100.00	
Acquired in 1925—		
Filing Boxes	45.35	
Steel Shelving	196.28	
Lighting for new stack	18.42	1,826.05
Total Inventory of Books and Fixtures		$25,946.96

INVENTORY OF FIXTURES.

General Account.

One (1) Steel Filing Cabinet	$35.00
Six (6) Card Board Filing Cases	3.00
One (1) Safe	30.00
Two (2) Wooden Tables	2.00
One (1) Desk	10.00
One (1) Addressograph	40.00
One (1) Addressograph File	10.00
Two (2) Wooden Tables	5.00
One (1) Flat Top Desk	15.00
**One (1) Underwood Typewriter	83.03
Two (2) Swivel Chairs	10.00
Twelve (12) Chairs	12.00
One (1) Directors' Table	25.00
One (1) Gavel and Block	10.00
One (1) Stove	38.40
Three (3) Rubber Strip rugs	3.00
One (1) Stove Plate	.50
One (1) Protectograph	20.00
Two (2) Clocks	15.00

One (1) Black Board	.75
Two (2) Fire Extinguishers	12.00
One (1) Brass Cuspidor	1.50
Five (5) Waste Baskets	2.50
One (1) Ballot Box	1.50
One (1) Multigraph	50.00
One (1) Type Stand	4.00
One (1) Step Ladder	1.50
One (1) Awning	12.65
One (1) Hat Rack	1.50
Globe Fixtures and Lights	13.95
Acquired in 1925—	
One (1) Table Lamp and Screen	11.50
One (1) Translux, 50x60	90.85
One (1) Door Check	8.50
Total	$579.63

**Acquired in 1925.

RECEIPTS.

General Account

Rent (From La. State Medical Soc.)		
4 months at $12.50	$50.00	
8 months at 20.00	160.00	210.00
Membership Dues		7,750.00
Telephone and Telegraph		37.29
Interest from the Library Fund account purchase of bonds		44.00
Remaining credit balance from the Southern Medical Fund		723.26
Library Fund, loan returned		300.00
Prepaid exchange on checks		.20
		$9,064.75

Library Account—

Interest Coupons, Mo. Pac. R. R. Bond	29.40	
Sinclair Oil Co. Bond	68.60	
Liberty Bonds	1,275.00	
Holland America S/S Co.	58.98	
Union Bag & Paper Co.	58.80	
St. Charles Ave. Bap. Ch.	29.40	
Georgia Baptist Hospital	29.40	
	1,549.58	
General Fund, Loan	300.00	1,849.58
Total receipts		$10,914.33

CASH STATEMENT.

General Account

Cash in bank at 12/31/24		$1,349.34
Receipts	$9,064.75	
Disbursements	9,929.94	865.19
Cash on hand at December 31st, '25		$484.15

Library Fund

Cash in bank at 12/31/24	410.33	
Receipts	1,849.58	
	2,259.91	
Disbursements	1,677.27	
Cash on hand at 12/31/25		582.64
Total cash on hand Dec. 31/25		$1,066.79

EXPENDITURES.

General Account.

Salaries

Miss Marshall, Librarian	$1,800.00	
Miss Maier, Asst. Secretary	1,200.00	
Miss Pic, Extra Stenogr.	50.00	
Miss Lathrop, Ex. Stenogr.	55.00	
Isaac Robinson, Porter	25.00	
James Gardiner, Porter	575.00	
Alfred Hosmer, Port, Tulane	60.00	
Charles Craig, Por. Tulane	60.00	$3,825.00
Stationery	265.82	
Telephone and Telegraph	146.20	
Heat and Light	52.65	
Ice	29.46	
Plumbing	4.00	
Insurance	289.00	
Floral Offerings (Deceased member)	30.00	
Commissioners of Election	15.00	
Auditing	25.00	
Table Lamp and Screen	11.50	
Translux Screen, 50x60	90.85	
Electrical work	7.02	
Repairing and taking down heater	14.50	
Repairing door lock	2.00	
Window panes	3.60	
Veneer (Varnish)	3.30	
Typewriter, turning in old typewriter for new Underwood	65.53	
Door Check	8.50	
Bunting	4.88	
N. O. Medical & Surgical Journal	275.00	
St. Chas. Ave. Baptist Church two bonds at $500 and int.	1,024.50	
Georgia Baptist Hospital Bonds, two at $5.000 and interest	1,024.50	
Meeting notices	8.70	
Petty cash	146.43	
Library Fund, Loan	300.00	
La. State Medical Society (dues)	2,257.00	6,104.94
		$9,929.94

EXPENDITURES.

Library Fund.

Abstract and Research Service

American Institute of Medicine	$120.00	
W. F. Prior & Co.	15.00	
Medical Library Association	10.00	
Thos. Nelson & Son	15.00	
Oxford University Press	5.94	$165.94

Binding

Express to bindery	8.66	
National Library Binding Co.	57.50	
Transportation charges	6.51	
Transportation charges	9.82	
Transportation charges	8.89	
National Library Bindery	182.75	274.13

Books

G. F. Wharton	26.00	
Stechert	.75	
Oxford University Press	4.94	
S. D. Siler	2.00	
Appleton	42.30	
Medical Interpreter Co.	9.00	
Wm. Wood & Co.	6.00	
American Medical Association	12.00	
J. A. Majors Co.	11.50	
L. S. Matthews	1.00	115.49

Office Supplies

Democrat Printing Co.	4.16	
Democrat Printing Co.	2.85	7.01

Miscellaneous

Lighting for new stack	18.42	
Petty cash	45.00	
Interest on bonds purchased	44.00	
Service charges, Marine Bank	25.50	
Refund to General a/c loan	300.00	432.92

Fixtures

Library Bureau, Shelving	196.28	
Library Bureau, Filing Boxes	45.35	241.63

Magazine Subscriptions

Moore & Cottrell	429.15	
H. W. Wilson	11.00	440.15
		$1,677.27

LOUISIANA STATE MEDICAL SOCIETY

H. Theodore Simon, M. D., Associate Editor.

MINUTES OF THE HOUSE OF DELEGATES.

The opening session of the meeting of the House of Delegates, Louisiana State Medical Society, was called to order at ten-thirty o'clock, April 14, 1926, in the New Court Building, Monroe, Louisiana, by President E. M. Ellis, who made an address of welcome and turned the meeting over to the Chairman of the House of Delegates, Dr. L. J. Menville.

Chairman Menville pointed out that a very extensive program had been arranged for and suggested that all matters coming before the body be disposed of as expeditiously as possible.

Chairman Menville announced that the members of the Credentials Committee were Dr. Harrison, Dr. Williams and Dr. Graves of Monroe, and the report of the committee was submitted by Dr. Harrison.

Secretary Talbot called the roll reporting forty-nine present, constituting a quorum.

Chairman Menville declared the members of the House of Delegates officially seated.

The next order of business was the reading of and the adoption of the minutes of the 1925 meeting. Dr. Chassaignac moved that the detailed reading of the minutes be dispensed with and that the Secretary give an abstract thereof. The motion was seconded by Dr. Chalaron and carried. Secretary Talbot read an abstract of the meeting of the House of Delegates in 1925. As there were no objections the report was declared accepted as read. Secretary Talbot then read in abstract the minutes of the Executive Committee meetings which were accepted as read.

In answer to an inquiry relative to the nomination and election of officers, Chairman Menville read Article 8, Section 3, of the Constitution.

The Reports of Officers followed. President Ellis read his report which was applauded. As there were no objections the report was referred to the proper committee appointed to report back to the House, on which committee Chairman Menville appointed Dr. Seemann, Dr. Paul Gelpi and Dr. Gouax.

Secretary Talbot read the report of the Secretary-Treasurer, a list of the members who have died during the year and the financial report. (Applause.) The report was received to be transmitted to the proper committee. Chairman Menville appointed Dr. Ledbetter, Dr. Gessner and Dr. Herold, to serve as the committee.

The report of the Chairman of Council was read by Dr. Couvillon. (Applause.)

Chairman Menville appointed on the Resolutions Committee Drs. Knighton, Daspit and Barrow.

Chairman Menville called for the reports of the Councilors and suggested that unless there were objections the reports would be received as read and all matter contained therein would be taken up in the proper order of business. Dr. Bernadas read the report of the First District. Dr. Kostmayer read the report of the Second District, Dr. Gouaux the Third, Dr. Herold the Fourth, Dr. Bennett the Fifth, Dr. Weiss the Sixth. Dr. Miller of the Seventh District was not present. Dr. Couvillon read the report of the Eighth District.

The report of the Committee on Scientific Work was read by Dr. Talbot, Chairman.

Dr. Ledbetter read the report of the Committee on Public Policy and Legislation, together with letters addressed to members of the House and the Senate in the State Legislature, and congratulated and thanked the parishes, the Secretary and the State Board of Examiners for their help. Dr. Ledbetter read the following recommendation:

Dr. Ledbetter: The Committee on Public Policy and Legislation would recommend that as the medical profession is desirous of being cognizant of all medical legislation, any member wishing to foster or introduce any medical legislation submit same to this committee for consideration. (Referred to New Business.)

We certainly feel that we ought to know of any legislation that is coming up because we are not responsible for any legislation unless it is endorsed by this committee and the House of Delegates.

Dr. Seemann asked that Dr. Dousson be given the floor in order to bring before the body a piece of legislation which he proposes to introduce. Dr. Dousson asked that he be given the privilege of the floor a little later on.

The report of the Committee on Publication was read by Secretary Talbot, Chairman.

The report of the Committee on Medical Education was called for but the Chairman, Dr. Lanford was not present.

On request of Dr. Simmons, Chairman of the Committee on Medical Defense, the report of that committee was postponed until the afternoon session.

The report of the Committee on Budget and Finance was read by Dr. Chalaron.

The report of the Committee on Journal, in the absence of Dr. Dowling, was read by Dr. H. B. Gessner of New Orleans, who also pointed out the wisdom of always having a reserve balance on hand. Dr. Gessner further brought out:

Dr. Gessner: With a view to benefitting and making the work of this Journal more effective, particularly in the hospitals, we have adopted a resolution offering to hospitals of Class A in that State and in Mississippi the opportunity of publishing their staff transactions in the Journal at one half of the cost. The cost to us under the present contract of printing a page of new matter is $4.40. At that rate it would cost a hospital staff $2.20 a page for the publication of that transaction.

We have prepared a by-law to cover the status of the Journal Committee in the Society. Up to now there has been incorporated in the by-laws no regulation for the Journal and we are going to suggest that the following matter be incorporated. This would be Section 10 of the by-laws.

"The Journal Committee shall consist of five members with overlapping terms of three years, of whom (this refers to the future years) one shall be elected by the House of Delegates in 1927, two in 1928 and two in 1929. At the expiration of the respective terms their successors shall be elected by the House of Delegates each for a term of three years. In the event of a vacancy occurring by resignation, death or otherwise, the President shall appoint successors to serve until the next meeting of this Society, successors then being elected by the House of Delegates. The Journal Committee shall have full control of the editing and publishing of the New Orleans Medical and Surgical Journal. They shall make an annual report to the House of Delegates. The State Society shall pay the Journal Committee $1 per year per member in consideration of which each member shall receive the Journal for one year."

That would cover the status of the Journal in the Society.

Dr. Gessner also brought before the body the matter of titles appearing after the names of authors of papers and asked that the House of Delegates express an opinion in the matter of using or omitting such titles.

Chairman Menville stated the report would be received and the contents taken up under the proper order of business. (New Business.)

At the request of Dr. Ducote, Chairman, the report of the Committee on Hospitals was postponed until the afternoon session.

Dr. Seemann, Chairman of the Committee on Health and Public Instruction, stated the committee had nothing to report at that time.

Dr. Weiss, Chairman of the Committee on the Care of the Indigent Physician, stated that the committee had nothing to report but that he had taken the subject up with two large insurance companies suggesting that they try to evolve some plan that might be acceptable to the members of the Society in this respect.

Dr. Gelpi, Chairman, reported for the Committee on Walter Reed Memorial, stating that the committee had not yet decided what form the memorial would take nor what sort of a drive would be made, that this would not be done until the necessary amount had been accumulated from the State Society. (Dr. Gelpi stated he would put this report in written form if desired.)

Dr. Carruth, Chairman of the Committee on Hygienic Marriage Law, requested that he be permitted to bring in his report a little later as he had not had time to confer with his committee.

The report of the Committee on Vivisection was read by Secretary Talbot.

Dr. Seemann, Chairman of the Committee on Health Problems in Education, stated the committee had nothing to report.

The report of the Committee on Louisiana State Council for the Medical Veterans of the World War was read by Secretary Talbot.

Dr. Cappel, Chairman of the Committee on Investigation of Veterans' Bureau, stated he had no written report to submit but wished to again submit the report submitted last year with the following addition: "We have had favorable recommendations by men sent from the Central Veterans' Bureau at Washington, recommending permanent buildings at Camp Stafford for our veteran patients."

The report of the Louisiana State Board of Medical Examiners was read by Secretary Talbot.

There were no reports made for the District Medical Societies.

COMMUNICATIONS.

Secretary Talbot read telegrams from the New Orleans convention bureau and from the Mayor of the city, requesting that the 1927 convention be held in New Orleans.

Chairman Menville suggested that the reading of communications be handled as swiftly as possible and any action to be taken pertaining thereto could come up under "New Business" in the afternoon.

Secretary Talbot presented the contents of the communications as follows:

"A communication from John M. Dodson, M. D., submitted to the Executive Committee and referred to the House of Delegates. This communication is in reference to the State Society subscribing for a manual which is published by the American Medical Association on suggestions for the conduct of periodic examination of apparently healthy persons. They are very anxious to have the State Society supply each member of the State Society with a copy of this manual and they state that they can supply these manuals at $80 per thousand. (New Business.)

"A communication referred to the Executive Committee and then to the House of Delegates in reference to the standardization of traffic laws for physicians. (New Business.)

"A communication from Dr. Olin West containing a manual on the constitution and by-laws for the state associations. The American Medical Association is desirous of having standardized the various constitutions and by-laws of the state societies throughout the United States and they have sent this manual along as a guide for our use." (New Business.)

Secretary Talbot brought up an amendment proposed at the annual meeting in 1925 by the retiring president, Dr. C. V. Unsworth, stating that the secretary-treasurer had complied with all the provisions in reference to the amendment of the charter. The amendment follows: In accordance with provisions for the amending of the charter the final vote on the above changes will be made by the House of Delegates in convention assembled, and that is, that six members at large be added to the executive committee and making eight members of the Executive Committee constitute a quorum.

It was moved by Dr. Herold, seconded by Dr. Bernadas and carried that the amendment as read be tabled.

Dr. Carruth presented the following resolution:

"Be it resolved, that the Louisiana State Medical Society favors the full and complete report of vital statistics provided for by present law and also favors the strengthening of said laws by an act of legislature charging the state board of medical examiners with the duty of refusing to grant and of suspending any certificate granted under Act 54 of 1918, and also to revoke such certificates or permits for persistent and willful violation of any law of the State of Louisiana relative to the practice of medicine or the duties of physicians or the registration of births and deaths, or any provisions of the sanitary code of Louisiana or any regulation of the State Board of Health of Louisiana." (New Business.)

Dr. Carruth also asked that Dr. Dousson, Registrar of Vital Statistics, be allowed to address the House, which request Chairman Menville stated would be granted.

On motion duly seconded and carried, the session adjourned at twelve-thirty o'clock.

Adjournment.

Wednesday Afternoon Session.

April 14, 1926.

The afternoon session of the House of Delegates convened at two-thirty o'clock, Chairman Menville presiding.

The report of the Committee on Hospitals was read by Dr. R. G. Ducote, Chairman. Dr. Ducote presented a resolution on Hospital Abuse.

Dr. Fossier spoke at some length upon the subject of hospital abuse and illustrated his talk with figure charts.

The report of the Committee on Medical Defense was read by Dr. R. O. Simmons, Chairman.

NEW BUSINESS.

Under the heading of "New Business," Secretary Talbot stated that the first matter to be taken up was the recommendation made by the Committtee on Public Policy and Legislation that any physician or members of the State Medical Society wishing to introduce medical legislation refer same to that committee for its consideration.

Dr. Gelpi moved the adoption of the resolution and the motion was duly seconded and carried.

The amendments to the by-laws proposed by the Journal Committee were read by Secretary Talbot. The matter of printing of titles of authors of papers was also taken up. Chairman Menville suggested that the suggested amendment be disposed of first. Discussion of considerable length followed in which Drs. Gelpi, Gessner, Bernadas, Seemann, Chassaignac and Walther took part. Chairman Menville called for a motion. Dr. Herold moved the adoption of the amendment. The motion was duly seconded. Further discussion by Drs. Bernadas, Fossier, Gessner, Chassaignac and Gelpi followed. The motion was put to vote and carried.

Dr. Seemann stated that in his opinion the delegates had voted only on that part of the Journal Committee's recommendation touching upon the allotment to the Journal and suggested that the

amendment as a whole be adopted. Motion seconded by Dr. Gelpi. Dr. Fossier again took the floor for discussion. The question was called for, the motion put to vote and carried.

Secretary Talbot read the resolution offered by the Committee on Hospitals. Dr. Dupuy moved the adoption of the resolution, which was seconded and carried.

Secretary Talbot read a request from the American Medical Association for standardization of constitutions and by-laws of state associations, a proposed draft being included with the letter. The communication was referred to the proper Committee on Revision of By-Laws.

A communication from the Bureau of Legal Medicine and Legislation in regard to standardization of traffic laws was read by Secretary Talbot. It was moved by Dr. Seemann, seconded and carried, that the Secretary be instructed to reply, declining to take up the matter at this time.

Secretary Talbot brought forward a request from the A. M. A. to purchase a manual of suggestions for the conduct of periodic examinations of apparently healthy persons, this manual to be distributed to every member of the State Medical Society. Moved by Dr. Fossier, seconded and carried, that the communication be received and filed.

Dr. Herold presented a resolution regarding the prescribing of heroin. Dr. Edgerton moved the adoption of the resolution, motion seconded and carried.

Dr. Chassaignac presented a resolution in reference to expert medical testimony. Dr. Chalaron moved its adoption, motion seconded and carried.

Dr. Chalaron offered a resolution for the publication of articles touching on public health and welfare. Dr. Blackshear moved the adoption of the principle of the resolution but that it be referred to the Council to work out the detail. Motion seconded. Discussion by Drs. Gessner, Walther, Fossier, Gelpi.

Secretary Talbot read the resolution touching upon the recording of vital statistics, offered by Dr. Carruth. On request of Dr. Carruth, Dr. Dousson spoke on the resolution. Dr. Fossier moved its adoption. Motion seconded. Discussion by Drs. Cappel, Carruth, Simmons and Douglas followed. Dr. Douglas moved that the discussion be closed and the motion put to vote. Motion seconded. Discussion by Drs. Seemann and Chassaignac followed and with the consent of the body Dr. Douglas withdrew his motion.

Dr. Cappel moved that the resolution be tabled. Motion seconded. Chairman Menville called for a rising vote and the motion was carried.

The application of the Franklin Parish Medical Society for a charter from the Louisiana State Medical Society was granted. The application of the Union Parish was also accepted by motion of Dr. Gelpi, duly seconded and carried.

Dr. Seemann, Chairman of the Committee on the President's report, stated the committee was not yet ready to report. Dr. Herold, Chairman of the Committee on the Secretary-Treasurer's report stated his committee was not yet ready to report.

The next order of business was the nomination of officers. Dr. Seemann nominated for President-elect, Dr. Herold of Shreveport. Dr. Simmons seconded the nomination. Dr. Hirsch and Dr. Cappel regretted that they could not second the motion. It was moved and seconded that nominations for president-elect be closed and that Dr. Herold be declared unanimously nominated. Motion carried.

Dr. White of Alexandria was nominated for first vice-president by Dr. Ducote. Motion seconded. Dr. LeDoux moved the nominations be closed and that Dr. White be declared unanimously nominated.

Dr. C. P. Gray of Monroe was nominated for second vice-president by Dr. Bernadas. Motion seconded. It was moved that the nominations be closed and the nomination of Dr. Gray be made unanimous. Motion seconded and carried.

Dr. R. G. Ducote was nominated for third vice-president, nomination seconded, moved and seconded that the nominations be closed. Motion carried.

Dr. Talbot re-nominated for secretary-treasurer by Dr. Graves for two years. Dr. Chalaron seconded the motion and moved that the nominations be closed. Dr. Talbot unanimously nominated.

Dr. Bernadas nominated to succeed himself as councilor from the First District by Dr. Chassaignac. Nomination seconded. Moved and seconded that the nominations be closed. Dr. Bernadas unanimously nominated.

Dr. Johns nominated for councilor from the Second District by Dr. J. Landry. Nomination seconded. Moved and seconded that the nominations be closed and that Dr. Johns be declared unanimously nominated. Motion carried.

Dr. L. C. Barrow nominated for councilor from the Fourth District by Dr. Butler. Nomination seconded. Moved and seconded that the nominations be closed and Dr. Barrow declared unanimously nominated. Motion carried.

Dr. Bennett was nominated for councilor from the Fifth District.

COMMITTEES.

Dr. Fossier and Dr. Elizabeth Bass nominated by Dr. Mayer. Seconded. Moved and seconded that nominations be closed and nominees unanimously elected. Motion carried.

Dr. Ledbetter, Dr. Leckert, Dr. Harrison, Dr. Ellis and Dr. Talbot re-elected to serve as the Committee on Public Policy and Legislation. Nominated by Dr. Seemann.

On the Committee on Publication, Dr. Fossier nominated Dr. Chassaignac; Dr. Jules Dupuy and Dr. Ayo nominated. Regularly moved and seconded that the nominations be closed. Motion carried.

Dr. Lanford re-elected to serve on Committee on Medical Education for three years.

Dr. Simmons re-elected to serve on Committee on Medical Defense for three years.

Present committee on Hospitals re-elected with the exception of Dr. Ducote who was replaced by Dr. A. J. Cameaux.

Present committee on Health and Public Instruction continued.

Dr. Herold re-elected to serve on Journal Committee and Dr. LeDoux elected to replace Dr. Hoefeld.

The re-election of Dr. Blackshear by the Executive Committee was approved by the body, as a delegate to the A. M. A. for 1926-1928. Dr. I. Hirsch elected as the alternate delegate for 1926-1928. Dr. Seemann elected as delegate for 1927-1929. Dr. Gelpi as the alternate for 1927-29.

Dr. Menville and Dr. Williams selected as nominees for the vacancy on the Louisiana State Medical Board of Examiners.

Dr. Douglas moved that the previous motion in reference to vital statistics which was tabled be brought from the table for reconsideration. Motion seconded and carried. Dr. Gessner took the floor on a point of order, stating that if the intent was to bring up a new resolution on the same subject no motion to reconsider should be necessary. Chair sustained the point of order. Dr. Seemann moved that the body revert to the former order of business. Motion seconded and carried. Dr. Douglas moved that the resolution be taken from the table and reconsidered in its new form and amended. Motion seconded and carried by a standing vote. Dr. Fossier read the resolution in its new form and discussed it at some length.

Dr. Simmons offered an amendment thereto: That it be the sense of this body that there should be established a Bureau of Vital Statistics in this State separate and distinct from the State Board of Health, Registrar of which shall be a member of this Society, named by the Society and appointed by the Governor of the State; that it shall be his duty to record, gather all births and deaths, and that a penalty shall be placed upon the heads of the households or the parents of the children that are born into the world if they fail to report within.....time; that the Legislature be called upon to pass a law to this effect if it is within their power to do so, and if not, that an amendment to the constitution of this State be submitted to the people for their ratification. The amendment seconded.

Discussion by Drs. Taylor, Dousson and Cappel followed. The Chair pointed out that the discussion was getting too far afield and suggested that the speakers confine themselves to discussion of the amendments. Drs. Gessner, LeDoux, Wright and Simmons took the floor.

Dr. Landry moved that the motion be tabled. Seconded and carried by a standing vote.

The next order of business was the election of fraternal delegates. Dr. Seemann moved that the secretary-treasurer go into consultation with the president-elect. Motion seconded and carried.

New Orleans was selected as the next meeting place.

The meeting adjourned at five-forty-five o'clock.

Adjourned.

MINUTES HOUSE OF DELEGATES.

Third Session. April 17th, 1926.

10:00 A. M.

The Chairman, Dr. Menville, called the meeting to order.

Dr. Mayer moved the reading of the minutes of the House of Delegates of April 14th, 1926, be dispensed with. Seconded. Carried.

REPORT OF COMMITTEES.

Dr. Couvillon, Chairman of the Council, stated that he had just gotten back to the meeting, and that while he was away had appointed Dr. Herold to act in his place as Chairman of the Council. However, it was impossible to get a quorum of the Council during the present meeting.

Dr. W. H. Seemann, as Chairman of the Committee on the President's Report, read the report of said Committee. Dr. Seemann moved the adoption of the first recommendation in the President's

Report. Seconded. Discussed by Drs. Bernadas, Seemann, Knighton, Ellis, Marvin Cappel. Dr. Seemann recommended that we delete the last part of this paragraph and let the rest of the resolution stand as it is. Seconded by Dr. Couvillon. Discussed by Drs. Harrison, Simmons, Menville, Ellis. Dr. Ellis asked if he could withdraw his motion. Dr. Menville suggested that we state we think it best not to have this resolution presented at this session. Dr. Chalaron moved to the effect that this body permit the President to withdraw that part of his report that dealt with this matter. Seconded by Dr. Blackshear. Dr. Menville suggested that we add that the time is not sufficient for the presentation of said resolution. Carried.

Dr. Wright stated that there is one part of the medical act which sooner or later will have to be modified, and that is the practice of mid-wife in Louisiana.

Dr. Ellis asked that with the permission of the House, and after considering the discussion, that he be granted permission to withdraw this motion so far as he is concerned individually.

Dr. Seemann read the second recommendation of the President's Report. Dr. Seemann moved the adoption of the resolution. Seconded. Carried.

Dr. Seemann read the third recommendation of the President's Report. Dr. Seemann moved the adoption of the resolution. Seconded. Carried. Dr. Seemann moved the adoption of the report as a whole with the correction made. Seconded. Carried.

The report of the Committee on the Secretary-Treasurer's Report. Dr. Herold, member of the Committee, stated that Dr. Ledbetter, the Chairman, had gone off with the folder with all the papers. Dr. Herold stated, however, that they commended the Secretary-Treasurer's Report. They wish to add the name of Dr. W. A. Stevenson, Oil City, to the list of physicians who have died during the past year. They also endorse his recommendations in regard to periodic health examinations, and suggest that this now be referred to a committee as to the proper means of handling this proposition satisfactorily, the committee to report to the Executive Committee during the current year. Dr. Wright moved the adoption of the report. Seconded. Carried.

Dr. John A. Lanford, Chairman of the Committee on Medical Education, read the report of his Committee. Dr. Johns moved the adoption of the report, and to state that he believes that the resolution should be adopted by our American Medical Colleges, and that a copy be sent to Dr. Bass, Dean of Tulane, and other medical colleges. Seconded. Carried. Dr. Wright moved that after the adoption the committee be commended for this particular resolution, and that our official organ publish the said resolution. Dr. Simmons also asked that it be sent to the State Board of Healths. Seconded.. Carried.

In regard to the amendment to the By-Laws for the function of the Journal Committee, the Secretary-Treasurer read the resolution which had been presented to the meeting of the House of Delegates on Wednesday, but which had to lie over to this meeting for adoption. Dr. Herold moved the adoption of the amendment. Seconded by Dr. Wright, who stated that in seconding same that he believes it should be the policy of the House of Delegates to rise to the aid of such a committee as the Journal Committee, and that we should have sufficient confidence in their ability. Carried.

Dr. Bernadas moved that, in regard to the adding of subtitles to names of doctors who are writing papers to be published in the Journal, the Journal Committee be given discretion in regard to same. Seconded. Carried.

Dr. Knighton, Chairman of the Resolutions Committee, read the report of said committee as follows:

Whereas, the members and guests of the Louisiana State Medical Society who have been in attendance upon the 1926 meeting in the City of Monroe are deeply appreciative of the many courtesies received, we beg to submit the following:

Be it resolved, That we extend most sincere thanks to the members of the Ouachita Parish Medical Society for their untiring and most effective efforts to make our stay in their midst pleasant and profitable, and especially do wish to thank the Committees on Arrangement and Entertainment for contributing so much to our comfort and pleasure as well as to the success of the scientific and business programs;

Be it further resolved, That we extend our thanks to the hotels for the splendid manner in which they have taken care of us;

Resolved further, That we are deeply grateful for the delightful and bountiful luncheons served by the Ouachita Parish Medical Society, Saint Francis Sanitarium and Riverside Sanitarium;

Be it further resolved, That our thanks be extended to the Monroe News-Star for the generous space devoted to our proceedings;

Be it further resolved, That we should mention in special way the splendid service rendered

by the Boy Scouts and we thank them most sincerely;

Resolved further, That our thanks be extended to those in charge of the entertainment for our visiting ladies; also the Lotus Club, Golf Club and the Parish and City Officials, and especially the Police Jury and to the citizens in general who have contributed in so many ways toward making our sojourn in the hospitable city of Monroe so delightful and pleasant;

Be it further resolved, That our thanks and appreciation be extended to our retiring President, Dr. E. M. Ellis, for his devotion and energetic effort which has contributed to the successful history of our Society for the past year;

Be it further resolved, That we extend our most profound thanks to our worthy and efficient Secretary-Treasurer, Dr. P. T. Talbot, for the splendid manner in which he has conducted the affairs of his office, which has been evidenced by the outstanding progress manifested in our State Society, and the high character of the Scientific Program offered at our present meeting;

That our thanks be also extended to our Assistant Secretary-Treasurer, Miss Mary Crossen, for her devotion to duty and discharge of work which has at all times been manifested.

Be it resolved, that we give expressions to our appreciation of the splendid executive ability displayed by the Speaker of the House of Delegates, which has so signally characterized the administration of the present incumbent, Dr. Leon J. Menville.

Dr. Taylor moved the adoption of the resolutions. Seconded by Dr. Gessner. Carried by a rising vote.

Dr. Knighton also read a resolution from the committee in regard to the following doctors who passed away during the past year: Drs. Marcus Feingold, J. W. Darby, W. S. Cushman, W. H. Weaver, H. L. Sanders, A. Nelken, F. B. Waits, E. D. Robbins, S. F. Braud, S. M. D. Clark, L. T. Donaldson, Sr. The members of the House stood in silence for one minute in memory of them.

The following names were asked to be added to the list of doctors who passed away during the year, their names however being on the list reported in 1925: Drs. Brewster, Oglesby and C. J. Gremillion.

ELECTION OF OFFICERS.

Dr. Wright moved the nomination of the officers as a whole. Seconded. Carried.

ELECTION OF SPEAKER OF HOUSE.

Dr. Mayer moved that the present incumbent, Dr. L. J. Menville, be re-elected. Seconded by Dr. Knighton. Dr. Menville stated that he thought it out of order, and that in all fairness he positively declines the election. A general discussion followed. Dr. Menville was unanimously elected for the coming year.

Dr. Wright gave a brief talk in regard to how glad the Ouachita Parish Medical Society was to have the privilege of entertaining the Louisiana State Medical Society.

Dr. Menville stated that he had asked Dr. Harrison Jordon to be present at this meeting, but that it would be impossible for him to come. Dr. Jordon is Chairman of the Committee on Public Health of this Legislature. He asked that all remember the name of Dr. Jordon.

It was voted that the order of business be reverted back to Report of Committees.

Dr. R. McG. Carruth, Chairman of the Committee on Hygienic Marriage Law, read the report of his committee. Discussed by Drs. Taylor, Carruth and Gessner. It was moved that the report be adopted. Carried.

Dr. Menville moved that suitable resolutions be incorporated in our minutes showing our appreciation of the unusual service of our esteemed President, Dr. E. M. Ellis. This was offered by Dr. Taylor and unanimously seconded by the House with a rising vote.

It was moved the meeting adjourn.

It was recommended to the House of Delegates by Dr. E. M. Ellis, President, that our Scientific Program be changed as follows:

"That we divide our Scientific Program into at least two sections, or more if expedient, and I furthermore believe if this is done that two days of intensive administration would be all that is necessary for the scientific part of our program, as we all know that no member remains over two days in attendance unless he is an officer.

I believe that it would be to the best interest of the Society if the by-laws were changed so that the nomination and election of officers would be on the first day of the meeting, and by doing this all politics would be eliminated so in the event of more nominations than one for any one office, the issue would be settled before beginning the scientific program. This I recommend for your consideration."

The Committee on the President's Report in considering the above, is desirous of members of the

Louisiana State Medical Society to have the opportunity of expressing their feelings in regard to this proposed change. Before this step is taken changing our Scientific Program, they are anxious to learn if it meets the approval of the profession at large.

After considering the subject write your views to the Secretary-Treasurer, 1551 Canal Street.

The following resolutions which were offered by the Committee on Medical Education were adopted by the House of Delegates:

Whereas, The American Public Health Association at its Annual Meeting in St. Louis, in October, 1925, listened to an address by one of its members, favoring a new doctor in each community where a Health Officer is needed, to be known as a Doctor of Public Health; and

Whereas, Several institutions of learning have introduced courses in Public Health whereby a layman as well as a physician may be instructed and in a comparatively short time qualify as a Doctor of Public Health, (D. P. H.) and be allowed to advise, qualify and practice preventive medicine; and

Whereas, The Louisiana State Medical Society believes that all Health Officials should first be physicians, (M. D.), who have the proper knowledge of the sciences concerned in Public Health, and that such knowledge can not be gained by any layman in two or three years, and

Whereas, Such an arrangement of a layman being a Health Official, places a double expense on the community, since it is necessary for the community to then procure the service of an M. D. in addition to a layman; and

Whereas, The State confers on an M. D. the right to practice medicine and surgery in all of its branches, while the special licensing of a D. P. H. would be special legislation tending to take from an M. D. that right.

Therefore, be it resolved, That the Louisiana State Medical Society believes all positions of trust pertaining to Public Health in any community should be held by physicians, (M. D.) and not by laymen holding D. P. H. licenses; and

Be it further resolved, That the Louisiana State Medical Society views with displeasure any move on the part of the American Public Health Association, which may express a desire to replace physicians as Health Officials by laymen with D. P. H. licenses; and

Be it further resolved, That a copy of this resolution be sent to the American Public Health Association; to all those institutions of learning where courses in Public Health are given with a view to conferring a D. P. H. Degree; and to every State Medical Society with a request that their component County Societies be made acquainted with the proposed activities of a Public Health Association, whose President is a layman.

The Shreveport Charity Hospital staff has decided to accept the offer of the Journal to publish a synopsis of its meetings at one-half cost and the reports of the sessions will soon begin to appear.

Among personal items of interest to friends throughout the state are the recent marriages of physicians in Shreveport, viz.:

Dr. Robert T. Lucas to Miss Ruth R. Dudley of Plano, Texas.

Dr. J. Edwin Slicer to Miss Jeannette Hill of Benton.

Two wards of the Shreveport Charity Hospital were gutted by fire in March, so that the institution is more crowded than usual; fortunately, there were no casualties. Preparations are being made to repair the damage, without delay. This incident illustrates the need of more fireproofing in hospitals and it is sincerely hoped that the present session of the legislature will find the funds to enable this particular institution to take steps in this direction.

PRESIDENTS HEROLD AND HEROLD

It is rare indeed that two brothers in their early manhood are honored in Louisiana or any other state by being chosen by the outstanding members of their professions to be their legal and honorary heads.

Such an honor has recently come to Dr. A. A. Herold, who was elected president of the Louisiana Medical Association and only Friday in Texarkana Mr. Sid Herold of Shreveport was elected president of the Louisiana Bar Association.

It must be indeed gratifying for these two brothers to know that in the same year they should both be so signally honored.

The Times in offering its felicitations to these two worthy citizens of Shreveport and Louisiana feel confident that their administration will be all that could be expected by their best well wishers.—(Shreveport Times Editorial).

LOUISIANA DOCTORS ATTENDING THE A. M. A.

Alden Bridge—J. B. Hall.

Alexandria—L. D. Gremillion, L. A. Myers, J. L. Wilson.

Baton Rouge—J. J. Robert.

Belcher—T. B. Tooke.

Berwick—J. C. Berwick.

Bethany—Thena Robinson.

Carville—O. E. Denny.

Caspiana—D. A. Huckabay.

Colfax—J. L. Woodall.

DeRidder—T. C. Moody.

Dixie—L. T. Baker.

Dubach—J. L. Smith.

Elm Grove—W. M. Scott.

Fisher—T. B. Younger.

Frierson—R. A. Stewart.

Fullerton—G. R. Carroll.

Gloster—F. O. Brinkley.

Good Pine—W. F. Wade.

Haynesville—Montrose Day, L. T. Waller.

Homer—J. D. Gladney, J. R. Turner.

Homesville—H. G. Huey.

Jeannerette—P. A. Boykin.

Lafayette—H. G. F. Edwards.

Lake Charles—G. C. McKinney, D. C. Iles.

Lecompte—F. M. Lett.

Leesville—D. O. Willis.

Mansfield—H. W. Jarrell, B. K. Parrish.

Minden—Wilkins McDade, S. F. Martin, R. E. Smith.

Monroe—A. G. McHenry, D. I. Hirsch, G. M. Snellings.

New Iberia—H. J. Dauterive, J. W. Shaw.

Ringgold—C. C. Allums.

Ruston—J. J. Bennett, W. S. Rutledge, S. L. White.

St. Gabriel—B. O. LeBlanc.

Shreveport—Louis Abramson, D. H. Alverson, S. C. Barrow, Darf Bean, R. H. Blackman, T. D. Boaz, W. P. Butler, G. A. Caldwell, R. O. Carter, G. H. Cassity, A. P. Crain, H. L. Crow, Oscar Dowling, D. H. Duncan, E. C. Edwards, F. J. Frater, B. C. Garrett, J. M. Gorton, R. W. Gorton, G. R. Gowen, W. R. Haswell, W. N. Hawkins, M. D. Hargrove, J. A. Hendrick, A. A. Herold, W. S. Kerlin, J. M. Mosely, G. W. Murphy, P. W. Oden, H. W. Paul, R. M. Penick, M, Pickard, L. H. Pirkle, H. J. Quinn, Thomas Ragan, C. P. Rutledge, W. J. Sandidge, J. L. Scales, I. H. Smith, A. J. Thomas, F. H. Walke, P. C. Worley, J. L. Kimbell.

Sibley—B. A. Norman.

Vivian—J. L. Page, H. W. Wren .

Winnsboro—J. M. Funderburk, V. J. Funderburk.

NEW ORLEANS DOCTORS WHO ATTENDED THE A. M. A.

C. A. Bahn, C. C. Bass, Elizabeth Bass, S. M. Blackshear, W. R. Buffington, Aldo Castellani, C. N. Chavigny, G. F. Cocker, Isidore Cohn, J. A. Danna, Amedee Granger, C. E. Granberry, J. B. Guthrie, G. R. Herrmann, Ralph Hopkins, J. R. Hume, Alfred Jacoby, F. E. LeJeune, I. I. Lemann, W. E. Levy, R. C. Lynch, Urban Maes, Rudolph Matas, Abraham Mattes, P. A. McIlhenny, C. J. Miller, J. H. Musser, W. D. Phillips, P. B. Salatich, E. C. Samuel, W. H. Seemann, S. K. Simon, M. T. Van Studdiford, H. R. Unsworth, W. A. Wagner.

Tuesday, April 27th witnessed the very happy occasion of the dedication of the new Xray Department of Touro Infirmary which was made possible through the gift of Mrs. Edward B. Benjamin and her sister, Miss Emelia Sternberger, in memory of their father, Emanuel Sternberger.

The Department has been arranged and has occasion of the dedication of the new X-ray Deequipment. The entire staff and members of the Board of Managers of Touro Infirmary and a number of distinguished guests were present, including all of the Roentgenologists of the city of New Orleans and others from Louisiana and Mississippi and Alabama together with very distinguished men of Medicine who were returning homeward from the Dallas Convention of the American Medical Association.

Dr. J. Numa Roussel was the toastmaster of the occasion and responses were made by Mayor O'Keefe, President Charles Rosen of the Touro Infirmary Board and Dr. Rudolph Matas in behalf of the Medical Profession. The address of the evening was made by Dr. James T. Case, of Battle Creek, Michigan, his subject being "The Roentgenologist and the Hospital."

TUBERCULOSIS AND PUBLIC HEALTH ASSOCIATION OF LOUISIANA

Through this medium we extend to our local affiliated groups, seal chairmen and all others who gave their support and co-operation during our recent seal sale, our gratitude for their help in making our campaign a success.

Our gross returns from the 1925 Seal Sale are $19,781.86, two-thirds of which is retained in the parishes, one-third comes to the state, and 5% to the National Association.

Our Annual Meeting was held on January 27, in accordance with the Charter. A representative number were present and plans for the future were discussed.

It behooves all friends of the tuberculosis cause to interview their various representatives and senators in order that they might bring them an interest in the prevention and eradication of tuberculosis. The Tuberculosis Commission needs more funds and they should be adequately provided for in order that work for a hospital may go rapidly forward. The Tuberculosis and Public Health Association is deeply interested in this and proposes to lend every bit of energy it can bring to play to further an adequate appropriation for tuberculosis work under the jurisdiction of the Commission.

Won't you be sure to see your Senator and Representative personally and explain the need of the situation and solicit support for same?

Our Orleans Parish unit extends thanks to its officers and members who so generously responded to make its 1926 campaign a sucess. A program of work for this year is being planned by the Orleans Parish unit, which they hope to have ready for our next bulletin.

As Health Day will be celebrated all over the country on May 1st, and has the endorsement of President Coolidge and Health Centers throughout the United States, it is hoped that all our local associations will participate in this demonstration.

Miss Bernice Wright, of Monroe, has succeeded Mrs. Fay Shannon Watts as Executive Secretary of the Ouachita Tuberculosis and Public Health Association. Mrs. Watts, who has resigned because of ill health, was an enthusiastic worker, prominently identified in the tuberculosis cause in Ouachita Parish. Under her guidance the Modern Health Crusade was extensively carried in the schools during the past year. Miss Wright is energetically and enthusiastically continuing this work.

Dr. John Schreiber, formerly associated with our Ouachita Parish unit, has transferred his activities to Washington Parish, as director of the Health unit. Dr. Schreiber has also launched the crusade in this parish.

A school for Dairyman was conducted in Tangipahoa, Louisiana, May 24-25-26, and at Hammond, Louisiana, May 27-28-29, under the auspices of the Louisiana State Board of Health, State Commissioner of Agriculture and the Dean of the Dairy Department of the State University.

WESTERN PHYSIOTHERAPY ASSOCIATION.

The eighth annual meeting of the Western Physiotherapy Association was held at the Hotel President, Kansas City, Mo., April 15 and 16, 1926, under the presidency of Dr. A. David Willmoth, Louisville, Ky. The following officers were elected for the ensuing year:

President—Lynne B. Greene, M. D., Kansas City, Mo.

First Vice-President—J. E. G. Waddington, M. D., Detroit, Mich.

Second Vice-President—O. M. Moore, M. D., York, Neb.

Secretary—Charles Wood, Fassette, M. D., Kansas City, Mo.

Treasurer — W. P. Grimes, M. D., Kansas City, Mo.

Registrar—E. J. Leigh, M. D., Hiawatha, Kan.

Board of Trustees—A. David Willmoth, M. D., Louisville, Ky.; F. E. Dillenbeck, M. D., Eldorado, Kan.

The association meeting was preceded by a six-day session of the Western School of Physiotherapy, a class of 75 attending. Next meeting will be held in Kansas City, April, 1927.

STOMATOLOGY NUMBER.

The July issue of Medical Life will be a Stomatology Number devoted entirely to the "History of Stomatology" by Dr. A. J. Asgis of New York. The issue will be profusely illustrated. There will also be a chapter by E. B. Hardisty on "Stomatologic Education in the Medical and Dental Schools in the United States in 1926."

EVERY BABY A FULL-TIME JOB.

The care of one baby is a full-time job for its mother for 5 hours and 41 minutes every day, and a part-time job the rest of the 24 hours, according to an estimate based on the reports of a group of 17 young mothers. The U. S. Bureau of Home Economics collected and tabulated the mothers' reports. The babies were under 1 year of age.

MINNESOTA FIGHTS DIPHTHERIA.

Diphtheria, the child's worst enemy, is being vigorously attacked in Minnesota. State health authorities propose to stamp out the disease by distributing toxin-antitoxin free in any amount needed to local health officers, physicians, and school boards throughout the state.

HOW TO INSURE HAPPY ADOPTION.

Adoption, like marriage, should not be lightly entered upon. In "Psychoclinical Guidance in Child Adoption," just published by the Children's Bureau, Dr. Arnold Gesell, of Yale, urges all child-caring agencies, both public and private, to

give every child under consideration for adoption complete mental and physical examinations, to determine so far as possible his mental and physical capacities, and to see to it that he lives with his foster parents for a probationary period before the final adoption papers are signed. Dr. Arnold Gesell's article contains the history of several typical cases brought to the Yale Psychoclinic. These illustrate the need of precautionary measures to safeguard the interests of foster parent and child alike.

LOANS FOR BABIES, FRANCE.

French mothers can borrow or rent for new babies cradles, clothes, baby chairs, perambulators, scales, and milk sterilizers through a Cradle Society just formed by the Besancon committee of the Red Cross. Two hundred and ninety new babies have been supplied already, no charge being made in two-thirds of the cases.

MOVIES A HOLIDAY TREAT FOR CHILDREN IN BOLIVIA.

Bolivian children of 12 years of age and under in Bolivia can go to the movies only on holidays and then just to see pictures authorized by the police, according to a decree recently issued by the President of Bolivia, the purpose of which is to safeguard the morals and welfare of the children.

NOTICE OF EXAMINATION FOR ENTRANCE INTO THE REGULAR CORPS OF THE UNITED STATES PUBLIC HEALTH SERVICE.

Examinations of candidates for entrance into the Regular Corps of the U. S. Public Health Service will be held at the following named places on the dates specified:

At Washington, D. C.	July 12, 1926
At Chicago, Ill.	July 12, 1926
At New Orleans, La.	July 12, 1926
At San Francisco, Cal.	July 12, 1926

Candidates must be not less than twenty-three nor more than thirty-two years of age, and they must have been graduated in medicine at some reputable medical college, and have had one year's hospital experience or two years' professional practice. They must pass satisfactorily, oral, written, and clinical tests before a board of medical officers and undergo a physical examination.

Successful candidates will be recommended for appointment by the President, with the advice and consent of the Senate.

Requests for information or permission to take this examination should be addressed to the Surgeon General, U. S. Public Health Service, Washington, D. C.

Hotel Dieu, New Orleans, is to be congratulated on the establishment of its electrocardiographic department. This laboratory is equipped with the very latest continental model of Boulitte's electrocardiograph. The department meets a pressing need not only in New Orleans, but in the surrounding territory.

The profession at large is cordially invited to avail itself of this most important means of cardiac diagnosis.

The department is in charge of Dr. A. E. Fossier.

MISSISSIPPI STATE MEDICAL ASSOCIATION

J. S. Ullman, M. D., Associae Editor.

TRANSACTONS OF THE HOUSE OF DELEGATES, 1926, MISSISSIPPI STATE MEDICAL ASSOCIATION.

The twenty-third annual session of the House of Delegates of the Mississippi State Medical Association met at 8:07 a. m. Tuesday, May 11, 1926, at the Edwards Hotel, Jackson, Miss., President G. S. Bryan, Amory, in the Chair. Roll call showed twenty-six members of the House present.

The Secretary read his annual report, which was referred to the following committee: J. R. Williams, W. L. Little and W. E. Noblin.

The Committee on Arrangements reported through R. W. Hall. At this point a recess of five minutes was had to permit the Councilor Districts to select members of the Nominating Committee, which resulted as follows:

First District—J. W. Lucas, Moorhead.

Second District—D. W. Coker, Walls.

Third District—M. W. Robertson, Rienzi.

Fourth District—

Fifth District—W. E. Noblin, Yazoo.

Sixth District—W. G. Gill, Newton.

Seventh District—E. M. Gavin, Richton.

Eighth District—J. S. Ullman, Natchez.

Ninth District—S. B. McIlwain, Pascagoula.

Dr. John Smyth, Fraternal Delegate from the Louisiana State Medical Society, was presented to the House.

A motion by J. S. Ullman to meet at 8 o'clock Wednesday morning prevailed.

The following amendment to the By-Laws was presented by S. W. Johnston:

"Amend Chapter 3, Section 4, to read 'fifteen' minutes instead of 'twenty' minutes." Adjournment.

The House of Delegates met at 8:10 Wednesday morning, the President in the Chair. Roll call showed forty-five present.

W. L. Little was elected member of the Budget and Finance Committee for three years, succeeding J. S. Ullman.

The amendment to the By-Laws introduced at Tuesday's session was called up and passed.

On motion the Council was requested to consider the publication of the oration delivered by Dr. G. S. Bryan in the lay press.

The following motion by W. H. Frizell was adopted:

"In as much as our present contract with the New Orleans Medical and Surgical Journal is no longer an experiment, but eminently satisfactory, and in view of our present financial condition,

"Be it resolved by the House of Delegates of the Mississippi State Medical Association, That the present contract with the New Orleans Medical and Surgical Journal be renewed in the same form for the next two years;

"Be it further resolved, That the Secretary of this Association be instructed to have printed in pamphlet form, for distribution to each member, the minutes of the annual meeting, together with the minutes of the Woman's Auxiliary, the Constitution and By-Laws of the Association, the President's Address, the roster of members and the roster of those in attendance, and committees and officers."

Treasurer Buchanan made his annual report, which was referred to the Committee on Budget and Finance.

A motion by Willis Walley prevailed requesting the Secretary to furnish the Journal of the American Medical Association with local news items.

J. R. Williams reported for the Committee on Necrology.

W. H. Frizell introduced a resolution looking to the redistricting of the Association into Councilor Districts.

On motion of D. W. Jones the House adjourned to meet at 8:30 Thursday morning.

The House of Delegates met at 8:30 Thursday morning, President Bryan presiding, thirty-six members answering roll call.

On motion the reading of the minutes was postponed until the afternoon session.

J. D. Green read a resolution looking to the correction of some of the Charity Hospital abuses.

W. H. Frizell called up the resolution providing for a redistricting of Councilor Districts. On

motion of J. S. Ullman the matter was referred to the Council with request that it present a plan at the 1927 session of the House of Delegates.

The Secretary of the Council read the report of the Council, which was adopted, following which the House adjourned.

The House met in pursuance of the By-Law provision immediately after adjournment of the General Session at 12:05 p. m., G. S. Bryan in the Chair.

Roll call showed sixty-three present. The report of Budget and Finance Committee was adopted. W. A. Dearman moved a vote of thanks to Jackson and the Central Medical Society for their generous hospitality, which was unanimously adopted.

A motion by the Secretary prevailed, authorizing him to furnish a copy of a periodic health examination form to each member of the Association.

O. N. Arrington moved that the address of President Bryan be referred to the Council with request that it be given the public press. Carried.

S. W. Johnston nominated Vicksburg for the 1927 meeting; H. L. Arnold nominated Meridian, and R. W. Hall nominated Jackson. The vote resulted as follows: Jackson, 5; Meridian, 25; Vicksburg, 30.

The minutes of preceding session were read and adopted.

The Nominating Committee reported as follows, the report being received on motion of S. W. Johnston:

"To the House of Delegates:

"The Nominating Committee has endeavored to select the names of men who are worthy of the offices for which they have been designated. Your Committee has had no thought but that of the merit of the candidates. It is therefore with great regret that we learn of sectionalism, factionalism, and undue political activity for or against one or another candidate.

"Your Committee wishes to take this opportunity to warn the Association that such activities are out of place in a scientific body, and if persisted in can only result in hampering the usefulness of the Association.

"The nominees are:

"For President, John Darrington, Yazoo City; T. E. Ross, Sr., Hattiesburg; H. A. Gamble, Greenville.

"Vice-Presidents, R. W. Hall, Jackson; E. L. Wilkins, Clarksdale; C. E. Catchings, Woodville.

"Councilor, Fourth District, T. W. Holmes, Winona.

"Councilor, Fifth District, D. W. Jones, Jackson.

"Delegate to the American Medical Association, Henry Boswell, Sanatorium; to Louisiana Association, W. G. Gill, Newton; to Alabama Association, R. A. Strong, Pass Christian; to Tennessee Association, J. W. Barksdale, Jackson; to Arkansas Association, D. C. Montgomery, Greenville.

(Signed) "W. G. GILL, Chairman."

On motion of S. W. Johnston, the Secretary cast the vote of the House for all the nominees other than those for the office of president.

W. E. Noblin and A. J. Ware were appointed tellers, and the House cast its vote for President, which resulted in the election of T. E. Ross of Hattiesburg.

(Signed) T. M. DYE, Secretary.

May 13, 1926.

MINUTES OF WOMAN'S AUXILIARY TO THE MISSISSIPPI STATE MEDICAL ASSOCIATION.

The Executive Council of the Women's Auxiliary to the Mississippi Medical Association convened in regular session on Tuesday afternoon, May 11, 1926, at 3 o'clock at the Y. W. C. A., with 8 members present, State President, Mrs. S. W. Johnston, of Vicksburg, presiding.

Mrs. Frizell of Brookhaven led the opening prayer.

The President called for the Treasurer's report, a summary of which follows:

Amount in treasury at last report	$23.75
Receipts	67.50
Total	$91.25
Disbursements	41.75
Balance	$49.50

Respectfully submitted,

Mrs. S. E. DUNLAP, Treasurer.

The President forcefully recommended a unification of committee work with regard to the American Association work and proposed committees on:

Organization,	Education,
Publicity,	Resolutions,
Finance,	Programs,
Public Relations,	Entertainment,
Public Health,	Constitution and By-Laws.

The following resolution was proposed:

That associate members be allowed at the discretion of the local organizations.

District reports were made by Mrs. Polk, Mrs. Blount and Mrs. Frizell.

The need for more definite aims definitely stated was discussed.

The President appointed Mrs. D. J. Williams chairman of the Nominating Committee.

The meeting adjourned in order to be on time at the reception at the Governor's Mansion.

Signed:

Mrs. S. W. JOHNSTON, President.

Mrs. HENRY BOSWELL, Acting Sec'ty.

The third annual convention of the Woman's Auxiliary to the State Medical Association was called to order by the President, Mrs. S. W. Johnston, at 9:30 a. m., in the assembly room of the Y. W. C. A., Jackson, Mississippi, May 12, 1926, with about 40 members present.

The invocation was given by Mrs. J. B. Black.

Minutes of the last annual convention were read by the Secretary and adopted.

The welcome address for the Hinds County Medical Auxiliary was delivered in a very clever and charming manner by Mrs. H. F. Magee, President of the Society.

Her comparison of the occasion to a surgical operation was carried out in a humorous and pleasing manner.

Mrs. H. R. Shands made the welcome address for the City of Jackson and delighted everyone with her charming account of the trials of the long suffering doctor's wife "over the telephone." Mrs. Shands took Mrs. Garrison's place for this address as Mrs. Garrison's mother was very ill.

A most fitting response to the welcome addresses was given by Mrs. W. H. Frizell of Brookhaven.

The state Treasurer, Mrs. S. E. Dunlap, was called on for her report, which was given in full and adopted.

The President announced the resignation of the following councilors:

Mrs. Leroy Wilkins, Clarksdale, First District.

Mrs. T. W. Holmes, Winona, Fourth District.

She also reported that there were no results attained as yet in the Second District, of which Mrs. B. S. Guyton, of Oxford, is councilor, or in the Third District, of which Mrs. J. M. Acker, Jr., of Aberdeen, is councilor.

Splendid reports were given by Mrs. A. Street, of Vicksburg, councilor to the Fifth District; by Mrs. W. G. Gill, of Newton, councilor for the Sixth District; by Mrs. E. N. Blount, of Bassfield, councilor for the Seventh District; by Mrs. W. H. Frizell, of Brookhaven, councilor for the Eighth District, and by Mrs. L. L. Polk, of Purvis, councilor for the Ninth District.

There was a general demand for a state-wide list of the members of the Auxiliary and recommendations made relative to procuring this list.

Mrs. D. J. Williams made a clear explanation of how and when the dues are to be paid. The amount of the local dues is to be determined by each local organization. Out of the local dues 50c is to be sent to the state Treasurer, and she sends 25c of this to the national Treasurer. As to time, it was decided by the Auxiliary of the A. M. A. that all state dues were to be turned into the national treasury by the first of November, making it advisable that local dues all be paid at the October meeting, a measure that might be indicated in the by-laws of each society.

The following committees were appointed by the President:

On Courtesy—Mrs. Leon Lippincott, Chairman; Mrs. B. T. Robinson, Mrs. Z. C. Hagan, Mrs. W. A. Carpenter, Mrs. G. P. Mason.

On Nominations—Mrs. D. J. Williams, Chairman; Mrs. W. H. Frizell, Mrs. R. B. Austin, Mrs. Parsons, Mrs. E. H. Galloway.

On Resolutions—Mrs. L. L. Polk, Chairman; Mrs. Little, Mrs. E. L. Posey, Mrs. Curry, Mrs. W. G. Gill.

At this point all business was suspended and the President introduced Dr. F. J. Underwood, who made a most helpful and inspiring talk. He expressed appreciation for the work of the Woman's Auxiliary and gave very definite suggestions as to some work that the organization could devote itself to and that falls within its legitimate scope. He gave a splendid account of the work of the Health Camp at Biloxi for under-nourished children between the ages of 7 and 12 years. This camp is under supervision of the State Board of Health. Last year they took care of 20 children for two months and this year expect 50. He suggested that the Auxiliary help furnish the Health Camp, help in selection of the children in the different communities, make talks on the Health Camps to clubs, and communicate with Mrs. R. S. Phifer, Jackson, for anything else needed. The expense for each child is about $50.00, and it will

take about $100.00 to get the camp in good condition for this summer. Plans are being made and funds collected for a permanent all-the-year-round camp, $10,000.00 toward this having already been donated.

Dr. Underwood then gave a helpful lecture on the needs of, and the work being done for, the preschool child, and recommended that the Auxiliary help in this work.

Reports were then read from the following societies:

The Hinds County Auxiliary, Mrs. J. B. Black.

The Vicksburg Auxiliary, Mrs. Bell.

Harrison-Stone Auxiliary, Mrs. D. J. Williams, for Mrs. Sheely, President.

The Tri-County Auxiliary, Mrs. Frizell, for Mrs. Hewett, President.

Holmes County Auxiliary had no report, and Mrs. A. Doty was suggested as president of this society.

The President followed the reports with her annual address, which was very helpful and stimulating.

Mrs. Williams announced a meeting of the nominating Committee at 9:00 a. m. Thursday.

The meeting was then adjourned to 9:30 a. m. Thursday.

The convention was called to order by the President at 9:30 a. m. Thursday, May 13th, at the Y. W. C. A. Mrs. W. H. Frizell led the opening prayer.

The minutes of the previous meeting were read and approved with corrections.

Business was now suspended while Dr. S. W. Johnston brought a message from Dr. Bryan, who was not able to be present for his scheduled address. Dr. Johnston very ably filled Dr. Bryan's place and stressed the need for doctor's wives to help in the preventative medicine program.

The following report was read and presented for adoption by Mrs. L. L. Polk, chairman of the Resolutions Committee:

First:

Whereas, our President, Mrs. S. W. Johnston, has recommended that local auxiliaries devote some time to work connected with hospitals, particularly the social life of the nurses.

Therefore be it resolved, That the State Auxiliary endorse her suggestions and urge their observance upon auxiliary members.

Second:

Whereas, the health work among under-privileged children is a subject that touches our hearts.

Therefore be it resolved, That the Auxiliary endorse the plans suggested by Dr. Underwood and pledge the co-operation of the Woman's Auxiliary.

Third:

Resolved, That associate members be allowed at the discretion of the local organization.

Fourth:

Whereas, the A. M. A. urges that Hygeia be placed in all the libraries and public schools.

Resolved, That the Auxiliary of the Mississippi State Medical Association Stress this very important part of health education through the various Women's organizations.

Fifth:

Resolved, That committees of the Mississippi State Woman's Auxiliary be made to correspond with the national committee, which include organization, finance, education, publicity, public relations, program, entertainment, constitution and by-laws.

The report was adopted.

The following report of the Courtesy Committee was submitted by the chairman, Mrs. Lippincott:

We wish to express our thanks to the Auxiliary of the Central Medical Society for the many delightful entertainments provided during our stay in Jackson. Especial mention is made of the tea at the Governor's Mansion so charmingly presided over by Mrs. Whitfield and hostesses, the gracious hospitality of the Y. W. C. A., the delicious lunch at the Parish House, the most pleasant ride about Jackson, including the interesting visits to the Baptist Hospital and the Jackson Infirmary.

We wish to express our appreciation to Dr. Underwood for his most helpful suggestions and to the press for all kindness and courtesies shown.

We very especially wish to thank the members of the State Medical Association and of the Central Medical Society, for their uniform kindness, courtesy and helpfulness, their generous help with our program, and their cordial and bountiful entertainment of Wednesday evening.

The report was adopted, by a rising vote.

The following report was submitted by Mrs. D. J. Williams, chairman of the Nominating Committee:

For President-elect, Mrs. W. H. Frizell, Brookhaven.

For First Vice-President, Mrs. C. A. Sheely, Gulfport.

For Second Vice-President—Mrs. A. G. Payne, Greenville.

For Secretary—Mrs. Henry Boswell, Jackson.

For Treasurer—Mrs. S. E. Dunlap, Wiggins.

For councilors:

First District—Mrs. T. G. Hughes, Clarksdale, for five years.

Fourth District—Mrs. A. M. Doty, Lexington, for two years.

Eighth District—Mrs. R. D. Sessions, Natchez, for four years.

All of these officers were unanimously elected and Mrs. Johnston, the beloved President was given a rising vote of confidence and thanks for her splendid work. She responded in a beautiful manner, saying that she was the granddaughter, daughter, wife, sister and cousin of physicians, and therefore especially in love with this work.

Mrs. Williams announced that there is an annual dues to the Southern Medical Auxiliary of $1.00, and it was voted that this be paid.

Mrs. Little moved that a note of sympathy and regret be sent Mrs. H. F. Garrison, whose mother's illness prevented her being present at the convention. Motion carried.

Mrs. Williams made a most interesting talk on the meetings and entertainments of the A. M. A. Auxiliary at Dallas, calling especial attention to the address made to the women by the editor of Hygeia.

Mrs. Williams also gave a good report of last year's Health Camp at Biloxi, and extended thanks for all help given by the different auxiliaries.

After a short talk by the President the meeting adjourned to meet next year at Vicksburg.

Signed:

Mrs. S. W. JOHNSTON, President.
Mrs. HENRY BOSWELL, Acting Sec'ty.

MISSISSIPPI NEWS.

DELTA MEDICAL SOCIETY.

The Delta Medical Society met in Greenville, Mississippi, on April 9th, and was highly entertained by the Greenville physicians and surgeons. It was one of the best and most enjoyable meetings of the Society since its organization, a meeting characterized by good attendance, splendid, interesting and practical papers, which received full and general discussion. Dr. J. E. Williams, of Benoit, Mississippi, was its able presiding officer, and Dr. R. C. Finlay, of Greenville, was the efficient secretary and genial host, who with all the other doctors of Greenville made our stay pleasant and profitable.

The evening banquet, presided over by our capable and versatile friend, Dr. D. C. Montgomery, was a fitting close to a perfect profitable and enjoyable day. Indianola, Mississippi, will entertain the Delta Medical Society at the fall meeting. Come and be with us, the pleasure will be ours.

NOTICE OF EXAMINATIONS BEFORE THE MISSISSIPPI STATE BOARD OF HEALTH FOR LICENSE TO PRACTICE MEDICINE.

The Mississippi State Board of Health will hold its annual examinations for license to practice medicine in Mississippi June 24 and 25, 1926. All applications to take the examinations must be in the office of the Board ten days before date of examination. This Board will send application blanks on request. The examination fee is $10.25 with the application. The fee is refunded only in case the applicant does not appear for examination. Diploma must be presented for verification before taking the examination. If diploma is not available on the above dates a certificate from the Dean of the Medical College to the effect that the applicant has successfully passed the final Medical School examinations will be acceptable on condition that diploma is later presented for verification before license is issued.

The office of the Mississippi State Board of Health is in the Old Capitol Building, Jackson, Mississippi. The examinations will be held in the House of Representatives in the New Capitol Building, beginning at 8:00 o'clock each morning on the dates indicated above. The subjects for the first day will be given in the order named: Anatomy, Chemistry, Physiology, Histology and Bacteriology, Pathology, and Materia Medica and Pharmacology. The subjects for the second day will be as follows: Hygiene, Surgery, Obstetrics

and Gynecology, Physical Diagnosis, Theory and Practice of Medicine, Diseases of the Eye, Ear, Nose, and Throat.

MISSISSIPPI STATE BOARD OF HEALTH,
Jackson, Mississippi.

MISSISSIPPI DOCTORS IN ATTENDANCE AT A. M. A.

Aberdeen—J. M. Acker, Jr.
Basfield—E. N. Blount.
Booneville—W. H. Anderson, W. H. Sutherland.
Brandon—W. H. Watson.
Calhoun City—J. F. Aycock.
Columbus—W. C. Brewer.
Corinth—M. K. Tedstrom.
D'Lo—G. C. Russell.
Drew—R. C. Smith.
Greenville—E. L. Fuller, G. H. Spivey, J. B. Hirsch.
Gulfport—Ezell Macann, M. W. Rainold.
Hattiesburg—C. C. Buchanan, T. E. Ross.
Hazlehurst—J. M. Calching.
Houston—V. V. Philpot.
Jackson—R. W. Hall, C. F. MacKenzie, E. L. Posey, H. R. Shands, F. J. Underwood.
Jefferson City—G. A. Johns.
Meridian—S. H. Hairston.
Prentiss—G. C. Terrell.
Sanatorium—Henry Boswell.
Shannon—S. C. Spencer.
Tishomingo—N. C. Waldrop.
Vicksburg—Garuth Darrington, S. W. Johnston, G. M. Street, J. S. Ewing.

BOOK REVIEWS

Recent Advances in Obstetrics and Gynecology: By Aleck W. Bourne, B.A., M.D., B.Ch. (Camb.), F. R. C. S. (Eng.). P. Blakiston's Son & Company, Philadelphia, 1926.

The author divides the treatise into two parts. First, he deals with recent advances made in obstetrics concerning several serious subjects which in recent years have been recognized as being preventable, in many instances laying stress particularly on the prenatal care and a thorough training of those intending to engage in obstetrical practice. The author emphasizes the causation of fetal deaths due in many instances to an unintelligent recognization of certain malpositions and the application of improper corrective measures. The chapters on blood chemistry and eclampsia are fully gone into. The question of puerperal sepsis, outside of various attempts with new forms of intravenous therapy, is still open for thorough research, and the author concludes with the same opinion as many other good authorities, that individual resistance plays a very important role in effecting a cure.

The second part, gynecology, opens with a chapter on general progress made in gynecology concerning sterility and diagnosis by the method of insufflation and impermeable substance (lipoidal) to X-ray in the tubes through the uterine cavity.

The chapters on X-ray, in obstetrics and gynecology, by J. H. Douglas, of electrotherapeutics in gynecology, by Justina Wilson, and radium of carcinoma of the cervix, by Malcolm Donaldson, are fully detailed.

ADOLPH JACOBS, M. D.

The Child: His Nature and His Needs: Ed. by M. V. O'Shea. Valparaiso, Ind., Children's Foundation. 1924.

"The Child: His Nature and His Needs" is the title given to a volume of some five hundred pages; a contribution of "The Children's Foundation" of Valparaiso, Ind., which represents a highly meritorious and welcome addition to the literature on the study of the child.

The presentation is entirely simple, lucid and concise and is also to be commended for its happy combining of a finely popular quality with thorough scientific accuracy. Perusal of this book should prove most stimulating and instructive to anyone, whether layman or physician, interested in this extremely important subject, as it is "a survey of present day knowledge concerning child nature and the promotion of the well-being and education of the young."

Professor O'Shea, of the University of Wisconsin, is the editor. There are three parts to the volume and twenty-one chapters, each by an eminent authority. Professor Mary Whitley, of Columbia University, presents "The Child's Instincts and Impulses" and "The Active Nature and Needs of Childhood," in two chapters. Professor E. A. Kirkpatrick, of Massachusetts, has written a splendid chapter on "The Child's Mastery of the Arts of Expression."

Dr. William A. White, with his characteristic skill and brilliancy, writes of "Nervous and Mental Hygiene Among Children in Present-Day Life." In discussing the relation of parent to child, he states: "The relation of the parent to the child is such that quite instinctively the child desires to be like the parent. The parent is the first model and it is very important that he should not fail. When neither parent is a worthy model and the two parents are at war with one another, the child has nothing to hitch to and often becomes hopelessly confused, helpless, and impotent when he undertakes life as an adult. He has never had any training in one direction. He has lacked a model and cannot develop one on the instant."

Dr. William Healy, of Boston, in a masterly fashion, writes on "The Treatment and Prevention of Delinquency." Professor Arnold Gesell, of Yale, thoroughly considers and discusses numerous problems in "The Care of Intellectually Inferior Children"; he emphasizes the value of recognizing defect, especially in the pre-school child, so that early suitable training can be instituted and tolerance and patience exercised. He recommends a maximum of praise and a minimum of scolding and regards vocational training as of paramount importance. In his words, "All but the lowest grades of mentally deficient children are educable, trainable, improvable. We cannot make over a mentally deficient child, into a normal child, but we can organize and condition his behavior in constructive ways."

An excellent chapter, "The Adolescent Period: Its Problems, Regimen and Hygiene," is contributed by Winfield Scott Hall, of Northwestern University. Of further interest to the reader is a comprehensive bibliography and the appendix: Biographical Data Concerning Contributors.

"The Children's Foundation" may be regarded, therefore, as having performed a real service, through the effective and enlightening emphasis of numerous aspects of these problems. Professor O'Shea is to be praised for his contributions, his clear delineation and discussion and his splendid editorial supervision.

Funds have been made available by the Trustees of "The Children's Foundation" making it possible to offer this survey, in the United States, upon the subscription of one dollar to the Publication Fund of the Foundation, for each volume of "The Child: His Nature and His Needs"; from booksellers it may be obtained for one dollar and twenty-five cents a copy.

It would be difficult to overestimate the value of this book, especially to school teachers.

CLARENCE P. MAY, M. D.

Handbook of Diseases of the Rectum: By Louis J. Hirschman, M. D., F. A. C. S. Fourth edition, revised and rewritten. The C. V. Mosby Company. St. Louis, 1926.

This book is confined to a discussion of only those cases which are amenable to office treatment. The plain, unaffected style and clear descriptions go to make a text that should be very useful to general practitioners for quick reference. In the etiology symptoms, diagnosis and treatment of the various diseases only the essential points are included, except some methods which the author mentions only to condemn. It has numerous well-selected illustrations which add greatly to the value of the book.

MAURICE LESCALE, M. D.

Medicine: An Historical Outline: By M. G. Seelig, M. D. Baltimore. Williams & Wilkins Co. 1925.

To the paucity of medical literature, by American authors, this volume of eight lectures is a welcome and valuable addition. Not pedantic, not ponderous, it offers the salient facts, figures, and fancies, of medical progress, in a form palatable for consumption by even the most jaded readers. Its format is excellent, its rhetoric that of the journalist, its facts and opinions those of a well-trained historian.

The blemishes one encounters are minor inexactitudes, largely those of the proof reader. The tyro would find no more instructive volume with which to undertake his studies in this field. Goethe has observed: "The best we derive from history is the enthusiasm it excites in us." In this Professor Seelig's contribution should succeed.

M. MALLOWITZ.

Feeding and the Nutritional Disorders in Infancy and Childhood: Julius H. Hess, M. D., Philadelphia. F. A. Davis. 1925. Fourth edition, revised and enlarged.

This work of Dr. Hess has for many years furnished the student and practitioner with a concise and simple discussion of infant feeding problems. This edition is the outgrowth of a smaller volume entitle "Principles and Practice of Infant Feeding" first published by Hess about ten years ago.

The Finkelstein classification of nutritional disorders in infants forms the basis of Hess' teaching and is of particular value in that it is predicated on the pathological physiology of these disorders. The discussion of such diseases as rickets, spasmophilia, celiac disease, scurvy and the anemias of infancy are thoroughly comprehensive and entirely up to date in this edition. Illustrations of gross and microscopic lesions are added where necessary. The chapter on suggested diets for older children up to six years is one of the best features of the book, giving in detail the time for feedings, what to feed and how much.

No pediatric library is complete without this excellent book.

L. VON MEYSENBUG, M. D.

PUBLICATIONS RECEIVED.

Paul B. Hoeber, Inc., New York: Collected Papers by the Staff of the Henry Ford Hospital, first series, 1915-1925. "Diathermy, With Special Reference to Pneumonia," by Harry Eaton Stewart, M. D. "Blood Chemistry, Colorimetric Methods," by Willard J. Stone, B. Sc., M. D. "Thomas Sydenham, Clinician," by David Riesman, M. D.

P. Blakiston's Son & Company, Philadelphia: "Materia Medica and Therapeutics, including Pharmacy and Pharmacology," by Reynold Webb Wilcox, M. A., M. D., LL.D., D. C. L. "Therapeutics, Materia Medica and Pharmacy," by Sam'l O. L. Potter, A. M., M. D., M. R. C. P. Lond.

J. B. Lippincott Company, Philadelphia, London and Montreal: "Diseases of the New-Born," by John A. Foote, M. D.

Lea & Febiger, Philadelphia and New York: "Modern Medicine, Its Theory and Practice," edited by Sir William Osler, Bart., M. D., F. R. S., re-edited by Thomas McCrae, M. D., Vol. III. "Emergency Surgery," by George de Tarnowsky, M. D., F. A. C. S., D. S. M. "The Clinical Interpretation of the Wassermann Reaction," by Robert A. Kilduffe, A. B., A. M., M. D.

Miscellaneous: The Rockefeller Foundation, Annual Report, 1924. "The Further Studies on Decrementless Conduction," by Genichi Kato, Tokyo, Japan.